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ABSTRACT

Three types of programs were operative in the Atlanta public elementary schools, the first of which was funded under Title I of the 1965 Elementary Secondary Education Act. This type of program entailed the hiring of the following staff: (1) lead teachers, who performed varied duties in relation to improving the reading instructional program; (2) educational aides, who were assigned to schools on the basis of enrollment; and, (3) social workers, who were primarily involved in activities to improve attendance. The Comprehensive Instructional Program (CIP) was directed toward improving achievement in reading and, for the first time this year, also in mathematics. Through the CIP, each school was encouraged to develop behaviorally stated objectives directed at improving the reading and mathematics instruction. The Follow Through Project was designed for disadvantaged pupils. Follow Through made use of the Interdependent Learning Model, a games approach to learning. The project utilized a specialized method of teaching phonics skills, and offered special instruction in music, art, speech, and inactive communication. In addition, medical and dental care and psychological guidance was offered to all eligible pupils. The performance of the Follow Through pupils was evaluated on the basis of the Follow Through Phonics Skills Test, the Metropolitan Readiness Tests, the Metropolitan Achievement Tests, the Self Appraisal Inventory, and the Test of Attitudes of Children. (Author/JM)

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RESEARCH AND DEVELOPMENT REPORT

Vol. VI, No. 11 December, 1972

PUPIL PERFORMANCE IN THE ATLANTA, GEORGIA, ELEMENTARY SCHOOLS.

H. R. BUTLER ELEMENTARY SCHOOL

1971-72

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Lead Teacher

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Principal

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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I. INTRODUCTION

The primary area of construction in the 1971-72 Butler Elementary School Prospectus was focused on plans for implementation of their reading program in the second, third, and fourth grades, since the needs and the academic performance of these children were somewhat representative of those of the entire school population. The types of proposed activities were for the most part also typical of the total school program. The school organization, consisting of self-contained classrooms in grades kindergarten through third and departmentalization in grades four and five, also was representative within this group. This report will include an evaluation of the progress made toward achieving the specific objectives stated in the school prospectus as well as a summary overview of the progress made on all grade levels, including achievement data, gain rate of effectiveness, and the cost expended to achieve these gains.

II. RATIONALE

The H. R. Butler Elementary School is located near the geographical center of Atlanta, in an area with a high concentration of low-income families, bounded on the north by a low-rent housing project and a major hospital, on the south by low-income private apartments, on the east by small businesses and on the west by a railroad. The majority of the children attending Butler School live in multiple family dwellings, generally low-rent apartments which were either federally or privately owned. A large majority were from single parent families who were receiving some assistance through Aid to Families with Dependent Children. Approximately 415 pupils were enrolled in Butler Elementary School in kindergarten through the fifth grade, which acts as a feeder school for the Walden Avenue Middle School.

Based on the fact that an estimated 63 per cent of the pupils enrolled in this school were members of families with an annual income of $2,000 or less and that the children had shown a need for compensatory services to promote their improved academic performance and self-image, Butler Elementary School qualified to receive supplementary funds and additional personnel through Title I grant allocations. Since so many pupils were

academically functioning one to two grade levels below their actual grade level placement, in all areas of achievement, primary emphasis was placed on an instructional program which concentrated in the area of reading as a starting point for this year.

Butler Elementary School was also eligible to receive special instructional assistance from the local Comprehensive Instructional Program (CIP) for teacher, diagnostic testing for the children, consultant services through the area office, and special funds for supplementary materials and supplies.

Butler Elementary School was actively involved in school-community affairs, stressing parental involvement in the school activities and in their children's learning processes throughout the year. A plan was proposed through the joint efforts of the school and community to obtain funds allocated under Title IV-A of the 1967 Amendments to the Social Security Act to meet the special family-oriented needs of both the school and community population.

III. NEEDS OF PUPILS

The following needs of pupils in Butler Elementary School were identified by both the faculty and administration through informal observations and the use of diagnostic instruments.

A. To develop skills in basic reading in preparation for social, vocational, and academic experiences.

B. To develop a more positive self-concept.

C. To develop those communicative skills appropriate for academic success.

D. To develop a desire to come to school regularly.

E. To be able to identify with the school through participation and a sense of belonging.

F. To be exposed to more positive cultural and enrichment experiences.

IV. GOALS OF THE PROGRAM

In order to meet the pupil needs, the following general goals were set forth to be pursued throughout the year:

A. To provide each pupil with systematic and sequential instruction at his level of proficiency, continuously advancing successfully to the next higher level without undue pressure.

B. To provide a reading program which emphasizes the development or improvement of basic reading skills, particularly word recognition skills and comprehension skills.

C. To improve the child's self-concept through successful learning experiences and self-awareness experiences.

D. To provide parents with the opportunity for meaningful involvement in school activities, through meetings and classroom participation.

E. To continue to improve pupil school attendance, particularly concentrating on the improvement of the attendance of those children who have indicated chronic absenteeism.

V. BEHAVIORAL OBJECTIVES

The following objectives were formulated to evaluate the extent to which the goals of the program had been accomplished in terms of expected pupil progress.

A. Of the pupils enrolled in grades two, three, and four, 75 per cent will increase their total reading score on the Metropolitan Achievement Tests (MAT) at the rate of at least one month's gain per one month's instruction between the pretest and posttest.

B. Of the pupils enrolled in grades two, three, and four, 75 per cent will exhibit a gain in mathematics at the rate of at least one month's gain per one month's instruction as measured by their pretest and posttest scores on the MAT.

C. Title I pupils in grades four and five who participate in the Youth-Tutoring-Youth Program will make greater annual gains in reading than nonparticipants, as measured by the reading subtest of the MAT.

D. Based on a longitudinal study, pupils in grades two, three and four will show an annual improvement in attitude toward school, statistically significant at the .05 level, as measured by the School Sentiment Index.

E. Those 40 selected pupils who participated in the Emergency School Assistance Program (ESAP) tutorial reading program during the Spring of 1971 will indicate a more positive self-concept by improving their score on the Self-Concept Rating Scale by at least 5 per cent. The teacher will rate the pupils in the Spring of 1971 and the Spring of 1972.

F. By May 1972 at least 9 parents will have been trained to assist teachers in their reading program and will be volunteering their services to teachers on a regular basis.

G. The average attendance for the parent involvement meeting will increase from 18 parents to 25 parents for the months of February, 1972 through May, 1972.

H. Pupils will increase last year's attendance average of 92 per cent (1970-1971) by at least 1 per cent or more for the current year.

VI. CRITICAL VARIABLES

The following critical variables were identified as areas in which the school proposed to make definite changes:

A. Reading Skills
   1. Word recognition skills
   2. Comprehension skills.

B. Mathematical Skills
   1. Computation
   2. Concepts
   3. Problem solving.

C. Attitude Toward School

1. Teachers
2. Peers
3. Social structure and climate
4. School subjects.

D. Self-Concept.

E. Parental Involvement

1. Training program participation
2. Contributing of volunteer services
3. Attending parent involvement meetings.

F. Attendance.

VII. SUPPORTIVE PROJECTS

In Butler Elementary School, there were several supportive projects within the school that provided supplementary funds, services or personnel above and beyond those provided through the regular school program. Each of these projects directly related to identified pupil needs and had specified program-wide objectives which were associated with the school's goals. A brief description of the supportive projects as they were implemented at Butler School follows:

A. The Title I Program

Title 1 provided the following personnel and compensatory services: (1) one lead teacher, (2) one social worker, part-time, one day per week, (3) three educational aides, (4) a tutorial program, and (5) limited funds for materials and supplies.

1. Lead Teacher -- The main efforts of the lead teacher at Butler School were directed toward raising the reading levels of the pupils in grades one through five, through an instructional program aimed at the development of basic reading skills necessary for successful academic achievement. The lead teacher also coordinated all the activities of support personnel as they related to the reading program. More specifically her duties included the following:

    a. Helped to plan and organize the total instructional program interrelating all subject areas with reading.

    b. Assisted teachers in diagnosing reading and/or other academic problems for classes, groups, and individuals, subsequently prescribing possible solutions or alternatives.

    c. Served as an overall resource person for teachers, pupils, and parents.

    d. Coordinated CIP activities in the school.

    e. Provided subject area workshops and demonstrations for professional personnel.

    f. Helped teachers provide classroom learning experiences designed to benefit each child and meet his individual needs.

2. Educational Aides -- The three educational aides were assigned to work with teachers as members of the instructional team. One educational aide worked exclusively in the kindergarten classroom and the other two rotated among the remaining teachers, allocating approximately one hour daily to each teacher. Their specific duties were assigned to them by the respective classroom teachers. These duties included:

a. Instruction of small groups of children with teacher guidance.

b. Instruction of individual pupils.

c. Assisting teachers with clerical tasks such as record keeping, attendance, examining pupils' work, and preforming duplicating and mimeographing pertaining to the classroom.

d. Assisting with the physical arrangement of the classroom and bulletin boards.

e. Assisting with the supervision of children on the playground and in the cafeteria.

f. Assisting with the physical education program.

3. Social Worker -- The social worker assumed all of the following responsibilities at Butler Elementary School, with particular emphasis on increased parental involvement and improved pupil attendance.

a. Removing or modifying causes for poor attendance and/or social maladjustment affecting school life for children referred by teachers, parents, or other community people.

b. Serving as the legal liaison between the school and the Juvenile Court, referring children and/or parents to court if judicial proceedings seemed indicated in attendance cases.

c. Increasing positive attitudes toward regular school attendance on the part of the teacher, pupils, parents, and community.

d. Assisting teachers and other staff to use social data in the teaching-learning process.

e. Working cooperatively with other human service agencies, such as Grady Hospital, Grady Homes, the Fulton County Health Department, the Department of Family and Children's Services, and Economic Opportunity Atlanta, so that effective working relationships and referrals can be made both ways.

f. Helping the school and parents find effective ways of communicating and cooperating in improving the educational opportunities for children.

g. Providing technical assistance to the principal and teachers in the formulation of school policies and procedures directly relating to the welfare of children.

h. Serving as the Test Coordiator for the school.

4. The Tutorial Program -- The Youth-Tutoring-Youth Program was designed to involve under achieving Title I and Neighborhood Youth Corps high school pupils in a mutual learning experience relationship with under achieving upper elementary Title I pupils. Approximately 15 pupils from the fourth and fifth grades at Butler Elementary School were assigned in pairs to tutors from Howard High School and interacted with these high school pupils daily, for a period of one hour, after regular school hours, engaging in a variety of activities planned by the tutors under the supervision of an educational aide. These activities were designed to complement the learning experiences of both tutor and tutee, eventually leading to improvement in their behavior in school and in their attitudes toward school.

5. Limited Funds -- Starter 101 materials were requested by Butler School early in the Summer of 1971, but did not arrive

until November, 1971. It was planned that low achievers and nonreaders in the first three grades would be using this phonetically oriented material instead of the basal series. Due to the fact that the materials arrived so late and inservice training would have had to be given to those teachers who would have used the series, it was decided to postpone this program until the following year because of the time limitation.

B. The Comprehensive Instructional Program (CIP)

The Comprehensive Instructional Program was a locally funded program, focusing on the area of reading in grades one through three and on the area of math in grades four through six. Through this program, pupils in grades one through three were diagnostically evaluated on their own levels of proficiency in reading skills three times during the year, to aid individual teachers in prescriptive teaching. Data from the second and third testing periods were quite useful to the teachers since they received the results a very short time after the test was given. Butler School pupils in the fourth and fifth grades were diagnostically evaluated in math during the Fall.

Since only one resource teacher was specifically assigned to CIP from the Area III Ofice, assistance was usually offered to the faculty through workshops in both math and reading given by the CIP resource teacher or other area personnel throughout the year. Two teachers attended the summer CIP inservice courses in reading but only one returned to teach at Butler School. Limited funds were available to the school to be used for supplementary instructional supplies. Manipulative math materials were ordered to be used in the fourth and fifth grades.

The city-wide goal of this program in all schools was one month's gain in reading scores in grades one through three for each month of instruction and one month's gain in math scores for each month of instruction in grades four through six.

VIII. MANAGEMENT AND CONTROL

Administrative Organization

The school faculty included sixteen regular teachers, two special education teachers, one lead teacher, one librarian, a part-time social worker, and a part-time music teacher. The principal and three teachers were new to the school this year but the rest of the faculty had been previously assigned to Butler School from one to fifteen years. There were no real staffing problems initially or throughout the year. One teacher did experience an extended illness but was ably replaced by a substitute teacher experienced in that particular subject area.

Grade level meetings were usually held monthly on an informal basis. In these meetings the teachers discussed curriculum and internal matters. One teacher was assigned as a chairman on each grade level, serving as a contact person for that grade level and a liaison between the grade level and the principal. Written reports of these meetings were submitted to the principal. At the end of the first quarter, all of the teachers met as a group to discuss school problems and to plan together. Parents volunteered to supervise all classes on this particular day to give the faculty the opportunity to be free for this meeting.

Instructional Organization

Classroom assignments in grades one through three resulted from loosely grouping pupils according to their ability, as assessed by their previous reading scores, informal testing, teacher records, and teacher

observations. Consequently, the range of abilities within each particular classroom was limited to some degree. Within each classroom, the children also were grouped for instruction, particularly in the areas of reading and math, dependent upon their abilities in these subject areas as assessed by testing.

The instructional program in grades four and five was departmentalized, incorporating the subject areas of reading, math, social studies, language arts, science, spelling, and writing. This type of instructional organization was implemented to prepare the children for the type of instructional program they would eventually receive at Walden Middle School, which is departmentalized within an open classroom setting. Each subject area teacher instructed six groups of children daily.

The average class enrollment was less than 29 pupils. Teachers in the kindergarten, the first grade, and the third grade were assisted two hours daily by Neighborhood Youth Corps pupils enrolled in the child development program at Howard High School.

Dismissal time for the kindergarten day was extended to 1:45 p. m. Often, these pupils remained in school for the entire day with parental approval.

Inservice Training

Faculty inservice training was held during preplanning week and throughout the entire year. Several Area III resource teachers conducted workshops, including topics such as materials and games in reading, learning centers, preparation for CIP tests and use of the resulting feedback, math instruction, and manipulative materials in math. A consultant demonstrated proper utilization of audio-visual equipment. One of the publishing companies conducted inservice training for the total faculty in the areas of reading and social studies; one teacher received CIP inservice training in reading and one teacher attended an inservice workshop in math. In addition, the kindergarten teacher and aide regularly attended workshops.

IX. PROCESS

In addition to the supporting services and personnel of the projects previously mentioned, examples of the types of activities that were implemented in order to achieve the school goals and behavioral objectives included the following:

A. Each pupils' academic level was continously assessed throughout the year using the Newman Analysis Test, administered in the Fall and Spring, the CIP tests, and informal inventories.

B. Enabling objectives were written by all teachers for six-week periods, based on the results of the diagnostic testing. Pupil progress was then assessed in terms of these objectives every six weeks.

C. The MacMillan Basal Series was utilized in reading, supplemented with the Open Highways workbooks, audio-vusual equipment and other related materials, such as the Lnaguage Lotto and Matrix games. Approximately 90 minutes daily was spent engaged in reading activities in the first three grades.

D. Emphasis was directed toward individualizing reading instruction as much as possible in the fourth and fifth grades, using supplementary materials, such as the Science Research Associates (SRA) reading kit, in addition to the basal series. These two reading teachers worked with groups of approximately 20 to 25 children for 45 minutes daily.

E. Low achievers, suspected mentally retarded children and those children with emotional and learning difficulties in grades one through three, were referred to the Reading Resource Room for additional assistance, particularly in reading. These groups were very small. The teacher used Starter 101 materials, the Open Highways Series and Starter Concept cards with these children.

F. During the first quarter, the Jewish Women's Council conducted an enrichment program with the children including dramatization,

language arts, verbal expresion, art work, and group interaction activities. Later in the year, a male volunteer from the Grady Homes Boys Club worked with third grade pupils daily with special emphasis directed toward improving the pupils' self-concepts.

G. Field trips were planned and executed to surrounding areas of interest. Many parents participated in this activity.

H. In order to stimulate parental involvement, monthly meetings were held by a strongly motivated group of parents. Under the guidance of the social worker, a workshop was offered to parents interested in being trained to act as volunteer "listening mothers," PTA meetings were held in the evenings, and parents were invited to visit the school whenever they had the opportunity.

X. EVALUATION INSTRUMENTS

The following tests and instruments were used to evaluate the progress of the pupils at Butler Elementary School:

A. The Metropolitan Readiness Tests (MRT) was administered to the first grade pupils in October, 1971, and to the kindergarten pupils in May, 1972.

B. The Metropolitan Achievement Tests (MAT) was administered to the second, third, and fifth grades in October, 1971, and to pupils in the first through the fifth grades in April, 1972.

C. The School Sentiment Index (SSI), an instrument designed to assess the pupil's attitude toward school in general and toward several dimensions of school (teachers, school subjects, school structure and climate, and peer relationships), was administered to a sample group of pupils in grades two, three, and four in February, 1972.

D. The Self-Concept Rating Scale (SCRS), a check list of 42 trait-descriptive adjectives designed to enable teachers to evaluate how their pupils perceive themselves (personal self) and their relationship with others (social self), was used by teachers in

grades one through four in the Spring of 1971, and again in the Spring of 1972, to rate the self-concepts of those 40 pupils who participated in the ESAP tutorial program in the Spring of 1971.

XI. FINDINGS

Evaluation of the accomplishments of the instructional program at H. R. Butler School took three approaches: (1) evaluation of stated objectives, (2) an overview of test performance in 1971-72, and (3) a longitudinal view of test results and statistical data for 1970-71 and 1971-72. The evaluation of stated objectives at times was supplemented by more comprehensive information to provide additional insight into the progress of the school toward its goals. Included in the overview of 1971-72 test results was information from all grade levels in the subject area of reading. Possible explanations of scores were explored through statistical analysis relating attendance and mobility to achievement. Readiness test scores for kindergarten pupils also were shown. In an attempt to gain perspective of the school program as a continuing effort toward specified goals, data from 1970-71 and 1971-72 were used for a longitudinal view of test performance. Segments of the pupil population were compared for the effects of mobility over a two-year period. Futher analysis of performance based on predicted gains and national norms were observed for the two years.

Evaluation of Behavioral Objectives

A. Of the pupils enrolled in grades two, three, and four, 75 per cent will increase their total reading scores on the Metropolitan Achievement Tests (MAT) at the rate of at least one month's gain per one month's instruction between pretest and posttest.

Accomplishment of this objective would determine satisfaction of the identified needs of pupils for improved skills in basic reading and communication. As its goal the school intended to provide a program emphasizing

these skills, particularly word recognition and comprehension skills. The program included systematic and sequential instruction at each child's level of proficiency.

The objective delineated here for second, third, and fourth grades assumed the administration of the MAT twice during the school year. This was accomplished for all grades except the fourth grade which was exempted from pretesting because of the administration of a state-wide examination. Fulfillment of this objective,therefore, can be determined for only the second and third grades. Pupils were tested during October and April of the school year, an instructional period of about six months. The objective of one month's gain per month of instruction thus would call for a gain of at least six months.

According to Table I, total reading scores, consisting of word knowledge and reading comprehension, did not show 75 per cent of the second and third graders achieving the performance objective. In the second grade, only 38 per cent of the pupils gained at least six months between pretest and posttest while in the third grade, 33 per cent achieved at least that amount. However, the mean gain for each grade level should be considered as a description of the performance of the grade as a whole as opposed to the progress of individual children. In the second grade where the mean gain in total reading was six months, the grade as a whole achieved the objective of one month of gain per one month's instruction, although only 38 per cent of the pupils actually increased their scores by six months or more. A mean gain of three months in the total reading scores of the third grade reflected the achievement of that grade as a whole but the previously stated objective was not met.

Making up the total reading score of the MAT are subtest scores in word knowledge and reading comprehension both of which were stressed in the school's program. Observation of these subtest scores revealed approximately the same number of second grade pupils improving by at least six months in both areas.

TABLE I

GAINS MADE ON METROPOLITAN ACHIEVEMENT TESTS
BETWEEN PRETEST AND POSTTEST*

Second Grade	Negative to 0		1 to 3 Months		4 to 5 Months		6 Months or More		Mean Gain (In Months)
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	
Word Knowledge	5	7.9	16	25.4	17	27.0	25	39.7	7
Word Analysis	5	8.2	19	31.1	16	26.2	21	34.4	6
Reading	7	11.7	26	43.3	5	8.3	22	36.7	5
Total Reading	4	6.7	18	30.0	15	25.0	23	38.3	6
Total Math	2	3.2	20	31.7	9	14.3	32	50.8	10
Third Grade									
Word Knowledge	21	33.3	15	23.8	11	17.5	16	25.4	3
Word Analysis	23	36.5	11	17.5	12	19.1	17	27.0	2
Reading	17	26.6	10	15.6	5	7.8	32	50.0	4
Total Reading	18	28.6	14	22.2	10	15.8	21	33.3	3
Math Computations	18	29.5	8	13.1	9	14.8	26	42.6	4
Math Concepts	25	39.7	12	19.1	13	20.6	13	20.6	2
Math Problems	25	40.3	16	25.8	11	17.7	10	16.1	1
Total Math	15	25.0	24	40.0	8	13.3	13	21.7	3

*There was a period of six months between pretest and posttest.

Individuals' scores, however, show that of those children who gained one month per month of instruction in reading total, almost 70 per cent made higher gains in word knowledge than in reading comprehension. In the third grade, the opposite was true. Considerably more children made higher gains in reading comprehension than in word knowledge. Of the pupils who gained six months or more in total reading, approximately two-thirds had higher gains in comprehension than in word knowledge.

The exact objective identified for reading improvement in grades two and three was not met, neither in the total reading score specified in the objective nor in the specific skills referred to in the program goals. However, significant growth was made in the second grade as indicated by mean gains of approximately six months in both the skills subtests and the total score.

B. Of the pupils enrolled in grades two, three, and four, 75 per cent will exhibit a gain in mathematics at the rate of at least one month's gain per one month's instruction as measured by their pretest and posttest scores on the MAT.

Although mathematics was not identified among the needs of the pupils, it did receive emphasis within the regular school program. Consideration of gains in this area was made as an indication of the progress of the type of instruction designed to advance pupils at their individual rates of achievement.

As previously stated under Objective A, the fourth grade could not evaluated in the exact terms of this objective. However, posttest results were examined for ending level achievement.

According to Table II, neither the second nor the third grade showed 75 per cent of the pupils exhibiting a one month gain per one month of instruction in mathematics. In the second grade, 51 per cent of the pupils made at least the six month gain required in the objective. The total math subtest of the MAT was used as the criterion test. No subtests of that test were available for analysis. Only 22 per cent of the third grade gained six months or more on the total math subtest of the MAT.

An obvious difference could be seen in the scores of the subtests comprising total math for the third grade. Twice as many pupils gained 6 months or more on the computation subtest than on the math total scores. The concepts and problem-solving subtest about equalled total math in the number of pupils meeting the objective.

The behavioral objective was not met in either the second or third grade. However, a high mean gain of 10 months was observed across the second grade level. This gain not only exceeded the objectives but also resulted in a mean posttest level of 2.5, or just two months behind the national morm. The trend previously observed among the subtests comprising the total math score for the third grade is observed again among the mean gains for those subtests. The gain in the computation subtest contributed a substantial part to the gain made in total math.

Whereas the behavioral objectives in reading and math specified that gain scores reach an indicated level, ending achievement level also represented a significant picture of pupils' performance. Table II shows frequency of posttest scores for reading and math subtests in grades two, three, and four. In the second grade for all subtests, approximately 70 per cent of the pupils were within one year of the national norm of 2.7. The percentage of the third grade, within one year of the national norm decreased to a range from 27 to 38 per cent so that generally pupils appeared to be at about the 2.4 level or only a few months higher than pupils in the second grade. In the fourth grade the percentage of pupils within one year of the national norm dropped to a range fromm 11 to 22 per cent with pupils' mean score at approximately the 3.0 level. The similarity in scores between grades two and three caused much concern that little gain was made in the third year of instruction. Futher, it was appalling that the fourth grade pupils were also only a few months higher than the second grade pupils. Hence, the pupils had, for practical pupposes, made very little gain in the third and fourth grades.

TABLE II

GRADE EQUIVALENT ENDING LEVELS
ON METROPOLITAN ACHIEVEMENT TESTS*

Second Grade	1.6 or Less		1.7 to 2.6		2.7 or More		Mean Ending Level
	No.	Per Cent	No.	Per Cent	No.	Per Cent	
Word Knowledge	22	35	27	43	14	22	2.3
Word Analysis	19	31	33	54	9	15	2.1
Reading	22	37	26	43	12	20	2.1
Total Reading	16	27	32	53	12	20	2.2
Total Math	19	30	21	33	23	37	2.5

Third Grade	2.6 or Less		2.7 to 3.6		3.7 or More		Mean Ending Level
	No.	Per Cent	No.	Per Cent	No.	Per Cent	
Word Knowledge	46	73	15	24	2	3	2.4
Word Analysis	39	62	17	27	7	11	2.4
Reading	43	68	19	30	1	2	2.3
Total Reading	46	73	16	25	1	2	2.4
Math Comput.	42	69	12	20	7	11	2.5
Math Concepts	42	67	18	29	3	5	2.4
Math Problems	41	66	19	31	2	3	2.5
Total Math	44	73	14	24	2	3	2.4

Fourth Grade	3.6 or Less		3.7 to 4.6		4.7 or More		Mean Ending Level
	No.	Per Cent	No.	Per Cent	No.	Per Cent	
Word Knowledge	57	89	6	9	1	2	2.8
Reading	56	86	7	11	2	3	2.9
Math Comput.	51	78	14	22	0	0	3.0
Math Pro. Solv.	54	84	10	16	0	0	3.0

*Posttest given April, 1972.

C. Title I pupils in grades four and five who participate in the Youth-Tutoring-Youth (YTY) Program will make greater annual gains than nonparticipants, as measured by the reading subtest of the MAT.

Through frequent tutoring sessions and identification with older pupils, tutees were expected to achieve more gains than other Title I pupils not a part of Youth-Tutoring-Youth activities. Names of other Title I pupils were not available so achievement of pupils in YTY was compared to that of the rest of the pupils in the fourth and fifth grades.

According to the educational aide, seven tutees, including three fourth grade pupils and four fifth grade pupils, attended the sessions regularly throughout the school year. Initially, there were attendance problems with the tutors, since many of them were seniors and had other school commitments in addition to their tutoring responsibilities. Eventually, ninth and tenth graders were chosen to be tutors and they seemed to work more effectively with the tutees.

The fourth grade tutees did not take a pretest so it was difficult to evaluate their progress. In comparing the academic progress of the four fifth grade tutees with that of their peers, as measured by Metropolitan Achievement Tests scores in reading, only one tutee exceeded the total fifth grade mean gain of one month in the Work Knowledge subtest, and three tutees exceeded the group mean gain of ten months in the Language subtest, two of the tutees did show more than one month's gain for one month of instruction between testing periods. With so few pupils participating in the YTY program, results of the tests were not conclusive. Generally, tutees performed at approximately the same level as the rest of the firth grade.

D. Based on a longitudinal study, pupils in grades two, three, and four, will show an annual improvement in attitude toward school, statistically significant at the .05 level, as measured by the School Sentiment Index.

This objective was directly related to pupils's needs for a more positive self-concept, a desire to come to school regularly, and the ability to identify with the school through participation and a sense of belonging.

In fulfillemnt of these needs, the school had proposed as one of its goals to improve the child's self-concept through successful learning experiences and self-awareness experiences.

In order to measure an annual improvement in attitude a pretest and a posttest must be administered at the beginning and end of a one-year period. The administration of the School Sentiment Index at Butler took place only once, in the Spring of 1972. Thus, no analysis could be made on a gain score for the 1971-72 school year. The intent of the objective was to consider the administration of the instrument as a pretest with the posttest to be administered in the Spring of 1973.

Observation of the 1972 scores in Table III shows that second and third grades generally held a more positive attitude toward school than fourth graders. This was true for every subscore except "school climate" where scores from the three grades were relatively the same. Comparing the second and third grades, whose total scores differed by only one point, scores were similar in the areas of "school climate," "school subjects," and "general," but very different in attitudes toward peers and teachers. Third graders were much more positive toward peers while second graders were more positive toward teachers.

It is anitcipated that the same children will be tested in the Spring of 1973 so that analysis of gain scores can be made.

TABLE III

THE PERCENTAGES OF FAVORABLE RESPONSES ON THE SCHOOL SENTIMENT INDEX FOR SPRING, 1972

Grade Level	Peer	School Climate	School Subject	Teacher	General	Overall Total
Second Grade N=21	63.8	71.4	81.6	81.0	82.5	77.0
Third Grade N=22	77.3	78.2	86.4	68.2	81.8	78.3
Fourth Grade N=23	52.6	74.6	61.7	58.6	69.1	61.0

E. Those 40 selected pupils who participated in the Emergency School Assistance Program (ESAP) tutorial reading program during the Spring of 1971 will indicate a more positive self-concept by improving their score on the Self-Concept Rating Scale by at least 5 per cent. The teacher will rate the pupils in the Spring of 1971 and the Spring of 1972.

As a measure of the school's goal to improve the child's self-concept through successful learning experiences, this objective was designed for those pupils who participated in the special ESAP program which provided individual tutoring.

The maximum score possible on the Self-Concept Rating Scale was 168 points. Pupil scores on the first rating ranged from 80 to 146 points and on the second rating, from 71 to 160 points. The mean score on the first rating was 121 points and the mean score on the second rating was 125 points, indicating some change in a positive direction but too little to be significant. Table IV indicated that only 16 of the 40 pupils actually improved their scores by at least 5 per cent, as projected in the behavioral objective set forth for them. Of the 40 pupils, the scores of 22 pupils increased, 1 pupil's score remained the same, and the scores of 17 pupils decreased.

The reliability of these data must be questioned, since a different teacher rated the children each time and individual opinions and perceptions can vary greatly and be quite subjective. It would have been more appropriate to use this instrument as an indicator of longitudinal change in self-concept if the same teacher who had initially rated the child in the Spring of 1971 could have that same child again in the Spring of 1972.

TABLE IV

SUMMARY BY GRADE OF GAINS MADE
ON THE SELF-CONCEPT RATING SCALE BY THOSE PUPILS
WHO PARTICIPATED IN THE ESAP TUTORIAL PROGRAM
IN SPRING, 1971

(N=40)

Grade Level	Number in Program	Mean Gain (In Points)	Pupils Gaining 5 Per Cent or More	
			Number	Per Cent
First	2	12	1	50
Second	10	10	5	50
Third	20	-3	5	25
Fourth	8	8	5	63

F. By May, 1972, at least 9 parents will have been trained to assist teachers in their reading program and will be volunteering their services to teachers on a regular basis.

Related to the stated goal of providing opportunities for parents to become involved in the school program, this objective also related to pupils' needs for improvement in reading skills.

In January, 1972, the lead teacher directed a three-day inservice workshop for volunteer parent reading tutors. Basic fundamental skills in the teaching of reading were taught to these parents, as well as use of audio-visual equipment, how to make learning games, and possible learning problems they might encounter. Although six parents initially indicated their interest in the workshop, due to a family illness, only five participants were able to complete the entire training session. These five parents were assigned to five teachers in the first three grades who had indicated their interest in receiving volunteer parental assistance. The parents worked in the classrooms three days per week for approximately two to two and one-half hours daily. In April, 1972, these parents were hired through Title IV-A funds to assist with the reading program at Walden Middle School. Although they were committed to work four hours daily at Walden, they reserved two afternoons a week to continue their volunteer assistance at Butler School.

Achievement data which might have reflected the effects of the parent volunteers were not available. Since assistance was given for only two months prior to testing, effects would probably not have been visible in the test results.

In March, 1972, five additional volunteer tutors, Antoine Graves Senior Citizens, volunteered between one and one-half to five hours of their services per day from two to five days weekly. They were very regular in attendance and took selected pupils out of their classrooms to listen to lessons previously introduced in the classroom and to assist with the mastery of simple skills. The classroom teachers worked directly with these tutors.

The tutors interacted with from one to six children daily for approximately thirty-minute sessions, generally working with the same children each time so that a supportive relationship would develop naturally.

Since these senior citizen tutors interacted with their tutees for less than one month within the pretest and posttest interval, it was not appropriate to measure their impact in terms of the tutees' progress on the Metropolitan Achievement Tests. Teacher response to this program, though, was very favorable.

G. The average attendance for the parent involvement meetings will increase from 18 parents to 25 parents for the months of February, 1972, through May, 1972.

The parent involvement group met monthly during the day time. Parent attendance at these meetings varied but generally averaged between ten to twenty parents regularly. The attendance did not increase during the last half of the year, but it should be stated that the quality of those meetings was consistently above average in all respects. The goals for this group were developed by the parents themselves at their first planning and organizational meeting. These goals were (a) to increase parent participation in the school and community and (b) to help parents become aware of the needs, problems, and aspirations of their children in order to relate to these needs in a positive manner.

Their meetings covered topics such as discussions about the school program and how parental involvement would enhance this program, discussions concerning the Title IV-A program and the needs of the community, a demonstration of how to make simple, inexpensive Christmas decorations for the home, discussions concerning dental care and health care, and Title I services. This same group spearheaded the volunteer listening parents project. They also co-sponsored an Easter egg hunt with the Antoine Graves Home in April for all Butler School pupils, co-sponsored a carnival and a Spring Follies with the PTA to raise money for the school, and cooperated with the PTA in sponsoring Teacher Appreciation Day in May. A final luncheon was held in May in appreciation of all the interest, cooperation, and services extended to the school by the parents, volunteers, and local community agencies.

H. Pupils will increase last year's attendance average of 92 per cent (1970-70) by at least 1 per cent or more for the current year.

The pupil's need to develop a desire to come to school regularly and the faculty's desire to improve attendance through special attention to chronic absentees formed the basis for this behavioral objective.

The percentage of attendance did not increase by one percentage point as predicted but lost a percentage point as seen in Table V. This loss seemed to be attributable to the extreme decrease in attendance in the kindergarten class with some contribution from the first grade. Only the pupils designated as Educable Mentally Retarded (EMR) showed a significant gain in attendance.

TABLE V

CUMULATIVE PERCENTAGE OF ATTENDANCE
1971-72

Grade	Per cent of Attendance 1970-71	1971-72
K	96	86
1	90	87
2	93	93
3	92	92
4	90	91
5	94	93
EMR	91	96
Total School	92 (K-7)	91 (K-5)

School-Wide Test Performance: 1971-72

Since the emphasis of the instructional program at H.R. Butler School was in the area of reading, observation of reading scores by grade level was appropriate for a general picture of the accopmlishments of the 1971-72 school year. Only scores of pupils taking both the pretest and posttest were considered.

While many pupils made satisfactory gains between the pretest and posttest, the number of pupils falling futher behind the national norm grew larger for each higher grade level. Tables VI and VII contain data concerning reading performance. In the second and third grades, approximately 43 per cent of the pupils taking both tests gained at least 6 months and 27 months were recorded for grades two, three, and five, respectively. Mean posttest scores for the same grade levels and the fourth grade regressed from 6 months behind national norms for second grade, to 14 months for third grade, to 18 months for fourth grade, and 20 months for fifth grade. Concern for this situation is further accentuated by the steady rise in the number of zero and negative gains as pupils proceeded to higher grade levels.

A satistical test of means between mobility groups was made to determine effects of mobility on reading test performance. Scores for pupils who took only the pretest were compared to pretest scores of pupils who took both pretest and posttest. Likewise scores of pupils who took only the posttest were compared to posttest scores of pupils taking both tests. The assumption was made that pupils who had taken only one of the tests were not enrolled in the school at the time of the other test. In effect they formed the mobile population of the school, moving in or out during the year. The tests showed no statistically significant differences between the reading scores of the mobile and stable population. (See Table VIII.)

Effects of attendance on gain scores also were tested for the reading subtest, but no significant correlation was found. (See Table IX.) This failure of gain and percentage of attendance to correlate is not unique to Butler School but is generally found throughout the local school system.

TABLE VI

FREQUENCIES OF GAIN SCORES ON THE
READING SUBTEST OF THE
METROPOLITAN ACHIEVEMENT TESTS*

Grade	Zero or Negative	1-3 mos.	4-5 mos.	6 mos. or greater	Mean Gain
2	7	26	5	22	5
3	17	10	5	31	4
4	—	—	—	—	—
5	32	9	8	18	2
All grades	56	45	18	71	—

*Only pupils taking both the pretest and the posttest were considered.

TABLE VII

FREQUENCIES OF POSTTEST SCORES ON THE
READING SUBTEST OF THE
METROPOLITAN ACHIEVEMENT TESTS*

Grade	More than 2 years behind	1-2 yrs. behind	1 month to 1 yr. behind	On or above grade level	Mean Posttest Score
2	—	22	26	12	2.1
3	9	34	19	1	2.3
4	28	28	7	2	2.9
5	36	24	6	1	3.7
All grades	73	108	58	16	—

*Only pupils taking both the pretest and the posttest were considered.

TABLE VIII

COMPARISON OF METROPOLITAN ACHIVEMENT TESTS READING SCORES
OF PUPILS TAKING PRETEST OR POSTTEST ONLY WITH READING SCORES
OF PUPILS TAKING BOTH PRETEST AND POSTTEST *

	Pretest Only			Pretest/Posttest			T	Posttest Only			Pretest/Posttest			T
Grade	No.	Mean	S.D.	No.	Mean	S.D.	Score	No.	Mean	S.D.	No.	Mean	S.D.	Score
2	6	1.5	.22	60	1.6	.65	-.461	5	2.5	1.47	60	2.1	.90	.823
3	7	1.7	.60	63	1.9	.45	-1.24	8	2.2	.59	63	2.3	.60	- .63
4	-	-	-	-	-	-	-	65	2.9	.64	-	-	-	
5	3	3.1	.17	67	3.5	.56	-1.205	3	3.5	.45	67	3.7	.67	-.405

*The MAT was administered to the fourth grade as a posttest only.

TABLE IX

CORRELATION BETWEEN METROPOLITAN ACHIEVEMENT TESTS
PRETEST/POSTTEST READING GAIN SCORES AND ATTENDANCE

Grade	Coefficient of Correlation D.F.	Gain
2	58	.0515
3	61	.0851
4		
5	65	.0428

At the end of the school year the Metropolitan Readiness Test was administered to kindergarten pupils to determine reading readiness. Distribution of scores are listed in Table X. One third of the pupils made a "superior" rating while two thirds made at least a "high normal" rating. Only two pupils were rated as "low" and the teacher indicated that these pupils had only been in the class for a very short time.

TABLE X

DISTRIBUTION OF LETTER RATING AND READINESS
STATUS CORRESPONDING TO VARIOUS RANGES ON THE
METROPOLITAN READINESS TESTS*

Number of Pupils	Score Range	Letter Rating	Readiness Status
10	Above 76	A	Superior
11	64-76	B	High Normal
6	45-63	C	Average
2	24-44	D	Low Normal
2	Below 24	E	Low

*Tests administered in Spring, 1972.

Longitudinal Observation of Test Performance : 1970-71 and 1971-72

Data available for two succeeding years is presented in Table XI to observe changes which had occurred on a longitudinal basis. From this table information can be compared for each grade level for the two years. In addition, the progress of a group could be followed as the pupils passed from one grade into the next.

Generally, the stable population of the primary grades of 1971-72 performed better than their counterparts of 1970-71. In the upper grades, the opposite was true. The difference in the size of the populations producing these scores for the two years was notable for every grade except the third. This discrepancy may have contributed to differences in scores.

Longitudinal information for a particular group of children was available only for two grade levels: the second grade of 1970-71 which was the third grade of 1971-72, and the fourth grade of 1970-71 which was the fifth grade of 1971-72. In actuality the pupils of 1971-72 listed in C of Table XI was not an exact sub group of the pupils whose scores are listed in A of the same table. However, they were the children who were enrolled in Butler School for both years although they may not have completed all tests for both years. Therefore, comparisons must be of a superficial nature and no conclusive statements could be made. The data implied that the stable population for the two-year period scored three months higher on the pretest of 1971-72 than their posttest levels of the previous year. This was appropriate since tests were administered one month prior to the end of school and one month after the beginning of school. Standardized tests allow for one month of gain over the summer months. The second grade performed better as third graders but the fourth grade performed more poorly as fifth graders.

The pupils enrolled for both years made similar, though slightly better, progress than the total stable population of 1971-72 of which they were a part.

TABLE XI

LONGITUDINAL COMPARISON OF MEAN READING PRETEST/POSTTEST SCORES AND GAINS ON THE METROPOLITAN ACHIEVEMENT TESTS

(1970-72)

	A				B				C			
	Pupils Tested in 1970-71 (Matched Scores)				Pupils Tested in 1971-72 (Matched Scores)				Pupils enrolled in 1970-71 and 1971-72 (Matched Scores)			
Grade	Number of Pupils	Mean Score Pre	Mean Score Post	Gain in Months	Number of Pupils	Mean Score Pre	Mean Score Post	Gain in Months	Number of Pupils	Mean Score Pre('71)	Mean Score Post('72)	Gain in Months
2	38	1.5	1.6	1	60	1.6	2.1	5	-	-	-	-
3	61	1.7	2.1	4	63	1.9	2.3	4	41	1.9	2.4	5
4	25	2.5	3.3	8	65	-	2.9	-	48	—	2.9	—
5	51	3.6	4.1	5	67	3.5	3.7	2	24	3.6	3.8	2

Futher analysis of reading scores was made on the basis of predicted achievement for each grade level. A regression equation employing factors of attendance, mobility, socioeconomic status, pupil-teacher ratio, percentage of pupils passing, and pretest scores formulated predictions of posttest scores and resulting gains. A ratio of actual gain to predicted gain yielded a percentage described as a gain rate of effectiveness. Another ratio of the actual posttest score divided by the national norm for the respective grade level resulted in an index of acceptability. Table XII shows the changes in the gain rate of effectiveness and the index of acceptability occurring over two years.

The gain rate of effectiveness for 1971-72 equalled or improved the rate of 1970-71 for every grade level although gains were minimal and at an unacceptable level. Improvements that were made in three grades were at least 50 points. Data not shown in the table indicated that predicted gains for these grades were higher for the year showing the greater rate of effectiveness.

The average index of acceptability for 1971-72 did not measurably deviate from the previous year. The gains of 11 and 8 points in grades two and three, respectively, were partially overcome by losses of 5 points for each of the fourth and fifth grades.

No definite trends in reading achievement were observable for the two-year period. Primary pupils of 1971-72 performed somewhat better than primary pupils of 1970-71, but fourth and fifth grade performance declined in the second year. Generally all pupils achieved closer to their predicted scores in 1971-72 than in 1970-71 but did not noticeably change the index of acceptability. The significance of these changes as part of a predictable trend will be more easily determined as data are collected for comming years. In general, the pupils are performing at about three-fourths of what was predicted for them and achieved approximately two-thirds of the national norm.

TABLE XII

EFFECTIVENESS AND ACCEPTABILITY OF PUPIL PERFORMANCE ON THE READING SUBTEST OF THE METROPOLITAN ACHIEVEMENT TESTS FOR 1971-72

Grade	Actual		Acceptable	Predicted	Gain	
	Pre	Post	Post	Post	Actual	Predicted
2	1.5	1.8	2.7	1.9	0.3	0.4
3	1.8	2.1	3.7	2.4	0.3	0.6
4	1.8	2.7	4.7	2.6	0.9	0.8
5	3.2	3.4	5.7	3.6	0.2	0.4

Grade	Gain Rate Of Effectiveness		Index Of Acceptability	
	1971-72	1970-71	1971-72	1970-71
2	75	0	67	56
3	50	0	57	49
4	113	60	57	62
5	50	50	60	65
Average	72	28	60	58

XII. COST ANALYSIS

An attempt was made to relate gains in reading achievement to the amount expended in general funds and compensatory funds. This relation took the form of a projection of the amount of funds necessary to achieve acceptable gains, i.e., one month of gain per each month of instruction. In order to determine the projection, the yearly per pupil expenditures were divided by the rate of reading gain, yielding the per pupil expenditures required to achieve 100 per cent gain.

Expenditures were obtained from the General Funds Financial Report and the Trust and Agency Report for June 30, 1972. Distribution of these funds by grade level was made uniformly for general funds, but compensatory funds were weighted in relation to actual utilization of resources as indicated by the school staff. Figures used to obtain the projection were thus broad estimates, distributed by grade level and divided by average daily attendance (ADA). Results should be regarded as relative indicators of the existing situation and not as final determinants of solutions to academic problems.

Projections of necessary funds for acceptable gains were possible for only grades two, three, and five since only they received comparable pretests and posttests. Both general funds and compensatory funds were used as a basis for the projections with further categorization into salary and non-salary items. Expenditures were relatively the same for all grade level in both general funds and compensatory funds. The fourth and fifth grades received general funds from the Comprehensive Instructional Program, making their per pupil expenditures 30 cents higher than those of the other grades. The per pupil expenditures for compensatory funds were higher by three dollars for grades one, two, and three due to concentration of Title I funds for materials in those grades.

Since expenditures were similar for each grade level, large differences in cost projections for 100 per cent gain were due to vast differences between the grade levels in rate of reading gain. Hence, a rate of gain of only 33 for the fifth grade caused their cost projection to be almost twice the projection for the third grade whose rate of gain was 64, and more than twice the projection for the second grade whose rate of gain was 74.

Futher analysis of instructional cost related per pupil expenditure of compensatory funds to the gain rate of effectiveness. (See Section IX Findings, Longitudinal View of Test Performance: 1970-71 and 1971-72 p.31.) This calculation determined the per pupil cost in compensatory funds for each unit of effectiveness. The cost of each unit of effectiveness was again much higher for the fifth grade than for the second or third grade. The average expenditures for the three grades was $2.32 per unit of effectiveness.

TABLE XIII

ANALYSIS OF PER PUPIL EXPENDITURES OF GENERAL AND COMPENSATORY FUNDS ACCORDING TO READING GAINS ON THE METROPOLITAN ACHIEVEMENT TESTS*

	K	1	2	3	4	5	Avg.
Average Daily Attendance (ADA)	23	61	71	74	—	67	59
Per Pupil Cost							
A. General Funds							
1. Regular							
a. Salary	732.02	732.02	732.02	732.02	732.02	732.02	732.02
b. Non-salary	79.35	79.35	79.35	79.35	79.35	79.35	79.35
c. Total	811.37	811.37	811.37	811.37	811.37	811.37	811.37
2. CIP							
a. Non-salary	0	0	0	0	.30	.30	0
3. Total General Funds							
a. Salary	732.02	732.02	732.02	732.02	732.02	732.02	732.02
b. Non-salary	79.35	79.35	79.35	79.35	79.65	79.65	79.35
c. Total General Funds	811.37	811.37	811.37	811.37	811.67	811.67	811.37
B. Compensatory Funds							
1. ESAP							
a. Non-salary	.46	.46	.46	.46	.46	.46	.46
2. Title I							
a. Salary							
1. Social Worker (71)	6.07	6.07	6.07	6.07	6.07	6.07	6.07
2. Lead Teacher	28.29	28.29	28.29	28.29	28.29	28.29	28.29
3. Social Worker (72)	31.05	31.05	31.05	31.05	31.05	31.05	31.05
4. Teacher Aides	35.60	35.60	35.60	35.60	35.60	35.60	35.60
5. Other	5.55	5.55	5.55	5.55	5.55	5.55	5.55
b. Non-salary	0	2.92	2.92	2.92	0	0	1.75
c. Total Title I	106.56	109.48	109.48	109.48	106.56	106.56	108.31
3. EPDA							
a. Salary	.86	.86	.86	.86	.86	.86	.86

TABLE XIII (Cont'd)

	K	1	2	3	4	5	Avg.
4. Total Compensatory Funds							
a. Salary	107.42	107.42	107.42	107.42	107.42	107.42	107.42
b. Non-salary	.46	3.38	3.38	3.38	.46	.46	2.21
c. Total Compensatory Funds	107.88	110.80	110.80	110.80	107.88	107.88	109.63
C. Total Per Pupil Cost							
1. General Funds	811.37	811.37	811.37	811.37	811.67	811.67	811.43
2. Compensatory Funds	107.88	110.80	110.80	110.80	107.88	107.88	109.63
3. Total Per Pupil Cost	919.25	922.17	922.17	922.17	919.55	919.55	921.06
D. Rate of Reading Gain For Pretest/Posttest Population	—	—	.74	.64	—	.33	—
E. Projected Cost For one Grade Unit of Gain							
1. General Funds	—	—	1096.45	1267.77	—	2459.61	1607.94
2. Compensatory Funds	—	—	149.73	173.13	—	326.91	216.59
3. Total Projected Cost For One Grade Unit of Gain	—	—	1246.18	1440.90	—	2786.52	1824.53
F. Gain Rate of Effectiveness	—	—	75	50	—	50	58
G. Expenditures per ADA of Compensatory Funds for Each Unit of Effectiveness	—	—	1.48	2.22	—	3.27	2.32

*Pre and Posttest data were only available for grades two, three, and five.

Since expenditures were similar on all grade levels, the differences between grades in reading achievement implied that cost did not affect achievement or the gain rate of effectiveness. Explanation of variance, therefore, must be found in other factors.

XIII. CONCLUSIONS

Based on information from the staff of H.R. Butler School and data from specified evaluative instruments, the following conclusions were made.

A. Kindergarten pupils are well prepared for first grade as demonstrated by "above normal" scores on the Metropolitan Readiness Tests.

B. Generally, pupils in grades two, three, and five are not meeting the specified performance objective of one month of gain per one month of instruction in the area of reading and math.

C. The second grade as a whole shows a mean gain in most areas appropriate to the instructional period.

D. Mobility makes no statistically significant difference in reading achievement of pupils in grades two, three, and five.

E. There is no statistically significant correlation between the percentage of attendance and achievement for pupils in grades two, three, and five.

F. Only pupils in grade four performed as predicted in the area of reading when the prediction was based on the formula used to determine the gain rate of effectiveness.

G. In FY72 grades two, three, four, and five equalled or improved their gain rate of effectiveness in reading over FY71 although the pupils performed at an effectiveness level of only 70 per cent in FY72.

H. In FY72 the average pupil performance in reading was 60 per cent of the national norm, only two points higher than FY71.

I. Pupils fall further behind national norms as they proceed to higher grade levels.

J. While pupils in grades two, three, and four generally display favorable attitudes toward school, pupils in grades two and three are considerably more positive than pupils in grade four.

K. Per pupil expenditures seem to have no significant effect on pupil achievement.

L. Some parents and community members are actively and significantly involved in both the academic and extra curricular activities of the school.

M. Attendance decreased in percentage points despite specific efforts to increase attendance.

XIV. RECOMMENDATIONS

The following recommendations are made in light of the identified goals of the instructional program:

A. Teachers should continue to emphasize individualized instruction in the area of reading.

B. Analysis of the instructional program should be made to determine when and why the pupils' rate of gain begins to decrease rapidly.

C. Analysis of pupil needs should be made in terms of motivational factors for learning.

D. The effort to involve parents and community members in the instructional program should be continued as a means to provide more individualized instruction.

The principal and the faculty of H. R. Butler Elementary School are to be commended for their expressed concern for the pupils as they leave the school. The continuing efforts of the staff to meet the academic needs of the pupils merit praise and personal satisfaction for all members of the faculty. The staff should intensify its efforts to improve performance on a longitudinal basis. The rather fine performance of pupils in kindergarten, first, and second grades should be extended to the rest of the pupils.

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DEAN RUSK ELEMENTARY SCHOOL

1971-72

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I. RATIONALE

Dean Rusk Elementary School, a modern, carpeted school built in 1969, is located in the southwest section of metropolitan Atlanta. The address is 433 Peeples Street.

There are no self-contained classrooms at Dean Rusk Elementary School; the spacious, open rooms contain several classes operating at the same time. Furthermore, the pupils in these classes are not identified by grade level. Instead, they are divided into twenty levels which form four large groups called pods. The four pods correspond to grade levels as follows: Pod I with the first grade, Pod II with the second and third grades, Pod III with the fourth and fifth grades, and Pod IV with the sixth and seventh grades.

The twenty instructional levels are not distributed equally among the four pods. They are grouped in the following way: levels 1-4 in Pod I, levels 5-11 in Pod II, levels 12-15 in Pod III, and levels 16-20 in Pod IV. (Levels 19 and 20 are combined.)

While the modern school building was designed to allow open classrooms, there are no recreational facilities for involved physical activities. The Boys Club Gymnasium, located across the street from Dean Rusk Elementary School, was used part-time for calisthenics and indoor sports.

The majority of the 630 pupils who attended Dean Rusk Elementary School during the 1971-72 school year were from low income families. The school, because of the high percentage of economically deprived pupils, was designated a Title I School. In addition, the school had benefit of the Follow Through Project.

Dean Rusk Elementary School served as a teacher training center for college students during the fall, winter, and spring quarters. The college coordinator who directed the training program was based at the school. There were approximately ten to fifteen college students practice-teaching each quarter.

Prior to FY 72, Dean Rusk Elementary School served as a base for three additional projects: the Teacher Corps Project, a special reading project initiated by Georgia State University, and a science education project directed by Georgia State University. These projects were not in operation at Dean Rusk Elementary School during the 1971-72 school year, but their influence was felt in the school program. An outgrowth of the Georgia State University sponsored science education project of 1970-71, in which college students taught science to pupils at Dean Rusk Elementary School one day per week, was a strong science program at the Pod IV levels.

The principal of Dean Rusk School wished to observe the strengthened science curriculum and to measure the pupils' increase in science knowledge and understanding. The second focus of the evaluation for FY 72 was to determine the impact of the Follow Through Project in grades K-2 at Dean Rusk School.

Supporting Projects

A. Elementary and Secondary Act of 1965 (ESEA) Title I

The emphasis of Title I Program at Dean Rusk Elementary School was on improving the reading skills of the most educationally deprived pupils. Toward this effort, a counselor-lead teacher and three aides were hired through Title I funds. Because the Follow Through Project emphasized reading also, the Title I aides served at non-Follow Through pod levels.

B. Career Opportunities Program (COP)

This program was a training program through which participants pursued professional certification. Although Career Opportunities Program (COP) paid no salaries for aides to attend accredited colleges or universities, one aide at Dean Rusk Elementary School participated in Career Opportunities Program.

C. Follow Through Project

The Follow Through Project was designed for disadvantaged pupils. At Dean Rusk Elementary School all pupils in the kindergarten through Pod II, level eight (corresponding to grade two in a traditional graded system) had benefit of the Follow Through instructional program.

Follow Through made use of the Interdependent Learning Model (ILM), a games approach to learning. The project utilized a specialized method of teaching phonics skills, and offered special instruction in music, art, speech, and inactive communication. In addition, medical and dental care and psychological guidance was offered to all eligible pupils (pupils from homes in which the income did not exceed $1,800 per year for a one child family plus $600 for each additional child).

D. Comprehensive Instructional Program (CIP)

The Comprehensive Instructional Program (CIP) was concerned with curriculum improvement and teacher inservice training. Reading and mathematics instruction in grades 1-3 were stressed during FY 72. Through the Comprehensive Instructional Program each school was encouraged to develop behaviorally stated objectives directed at improving the reading and mathematics instruction.

II. NEEDS OF THE PUPILS

The Follow Through pupils at Dean Rusk Elementary School were recognized as having the followng needs:

A. To learn to read.

B. To develop mathematical ability.

C. To develop positive self-concepts and positive attitudes toward school, teachers, and peers.

D. To become independent learners.

E. To receive parental reinforcement for the Follow Through instructional program.

F. To receive medical and dental care.

G. To have psychological services available when needed.

The pupils at the Pod IV level were identified as needing specialized science instruction.

III. GOALS

The goals of the Follow Through Project were developed on the basis of the identified needs of the pupils. They were as follows:

A. To teach pupils to read.

B. To teach pupils mathematics skills.

C. To enable pupils to develop positive self-concepts and to gain positively in attitude toward school, teahcers, and peers.

D. To enable pupils to become independent learners.

E. To promote parental involvement in the Follow Through Program.

F. To provide medical and dental care for the pupils and to teach these pupils good health habits.

G. To provide psychological services to pupils.

Based on the identified need for more complete science instruction at the Pod IV level, the goal at Dean Rusk Elementary School was to provide a science curriculum which included the reading of science materials, demonstrations by the science teacher, observation and experimentation by the pupils inside and outside the classroom, and science field trips.

IV. OBJECTIVES

Behavioral objectives were developed for Follow Through during FY 72. They were as follows:

A. The kindergarten pupils will be introduced to the Direct Approach to Decoding (DAD) Program which is designed for teaching phonics skills. Beginning with grade one, the pupils will increase their competence in phonics skills so that they will make the following gains on the Phonics Skills Test: eight levels for grade one, fifteen levels for grade two, and ten levels for grade three.

B. First grade pupils who have been in the Follow Through Program for the kindergarten year will score "C" or higher on the Metropolitan Readiness Tests (MRT). The same percentage of first grade pupils who score "C" or higher on the Metropolitan Readiness Tests will score 1.6 or above on the reading posttest of the Metropolitan Achievement Tests (MAT). The score 1.6 indicates a grade level of first grade, six months. For the second and third grade pupils, there will be a reading gain of one month for each month in school as indicated by the Metropolitan Achievement Tests (MAT) pretest and posttest.

C. The first grade pupils who participated in Follow Through's kindergarten will score "C" or above in mathematics on the Metropolitan Readiness Tests (MRT); those first graders scoring "C" or above on the Metropolitan Readiness Tests (MRT) will score at least 1.6 in mathematics on the Metropolitan Achievement Tests (MAT). The second and third graders will gain one month in mathematical ability for each month in school. This objective is stated with the qualification that Follow Through teaches mathematics using a logical approach.

D. The pupils will demonstrate significantly higher (.05 level) self-concepts on the Self Appraisal Inventory than the comparison group.

E. The pupils will increase significantly (.05 level) in positive attitudes toward school, teachers, peers shown by the pretest and posttest of the Test of Attitudes of Children (TAC).

F. A games approach will be used to enable pupils to become independent learners and their progress will be judged individually by observation, using a checklist.

G. The parents or guardian of each eligible pupil will be visited during the year by the parent workers, who will demonstrate to the parents the Follow Through games and encourage the parents to play the games with the child. Parents will be invited to parent meetings, to visit the classroom, and to participate in parent volunteer groups throughout the year.

H. Because the emphasis of the Follow Through health program is toward prevention and health education, each eligible child in the program will receive complete medical and dental care and daily instruction so that he will demonstrate good personal health habits. This will be evaluated by a survey-checklist. In addition, parents will be invited to attend sessions in which instruction in nutrition will be given.

I. Psychological services will be made to all eligible pupils as needed. Referrals to psychologists will be made by teachers, social workers, or Follow Through staff when a need is observed so that the reason for referral will be eliminated.

The objective based on the goal of the science program was as follows:

A. The pupils will achieve at least one month gain in science skills for each month in school as demonstrated by the pretest and posttest of the Metropolitan Achievement Tests (MAT) science subtest.

V. CRITICAL VARIABLES

A. Phonics skills.

B. Total reading.

C. Mathematics skills.

D. Self-concept.

E. Attitude:

1. toward school,
2. toward teachers, and
3. toward peers.

F. Parent involvement.

G. Health care.

H. Psychological services.

I. Independence in learning.

J. Science skills.

VI. MANAGEMENT AND CONTROL

Several changes were made in Follow Through personnnel during FY 72. One change was strictly that of title. Since the roles of the lead teachers for school administration and the lead teachers for Follow Through differed, confusion arose in the schools. Therefore, the lead teacher for Follow Through was given the title program assistant. The program assistant worked directly under the principal to coordinate the Follow Through activities at Dean Rusk Elementary School.

A parent of one of the pupils was hired to assist the program assistant. This parent was called a parent assistant and handled all clerical work involving Follow Through. Other local Follow Through staff included an instructional assistant, ten classroom teachers, and ten educational aides (one aide to serve each Follow Through class). Four parent workers, who were parents of Follow Through children, worked with Follow Through at Dean Rusk School. They visited in the home of each Follow Through

child, supervised the transportation of Follow Through eligible children to the dentist and physician, and sought parent volunteers to chaperone pupils on the trips for medical and dental purposes as well as educational trips in the city of Atlanta. In addition, parent volunteers were asked to aid in the classroom and to aid in making Follow Through instructional materials.

The Follow Through cental staff, who served Dean Rusk School and the other five Follow Through schools, consisted of a director, two instructional coordinators, a coordinator of instructional assessment and development, a coordinator of health services, two social workers, two psychologists, and an arts and communication team of six persons.

The activities of the three Title I aides at Dean Rusk School were coordinated by the counselor-lead teacher and the principal. The aides served in non-Follow Through levels and worked, under the direction of the classroom teachers, with pupils in small groups.

The local science program at Dean Rusk School was aimed at pupils in Pod IV. One science teacher conducted the four science classes of Pod IV. He worked directly under the supervision of the principal. At the classroom level, the practice teachers aided the science teacher by helping to supervise the science experiments and by conducting science demonstrations for the pupils.

The science resource teacher for Area I aided in obtaining textbooks and supplementary materials. Two professors of science education at Georgia State University, Dr. Edward Colton and Mr. Robert Williams, served as consultants for the program.

VII. PROCESS

The Interdependent Learning Model (ILM) was the basic model for teaching all Follow Through classes. The model made use of a game format for reinforcing classroom instruction and strengthening skills. The games, which were made by the Follow Through staff and parent volunteers, were developed as needed.

An important component of the Interdependent Learning Model (ILM) was the method utilized for teaching phonics skills. All classes in Pods I and II (corresponding to grades K-2) at Dean Rusk School were taught the Direct Approach to Decoding (DAD). The DAD was used along with basal readers.

A Follow Through aide was assigned to each Follow Through class. The aide worked under the guidance of the classroom teacher and served mainly as a tutor for small groups of pupils.

A Follow Through communication team, consisting of one art teacher, one music teacher, and one speech teacher, served the Follow Through Program at Dean Rusk School. The three teachers divided their time equally among three Follow Through schools, spending one and one-half days each week at Dean Rusk School. Rather than teaching classroom teachers, the music and art teachers rotated classes within Dean Rusk School, teaching the pupils in the presence of the classroom teachers. The music activity was taught to a class and was then followed up by the classroom teacher. However, art was taught to pupils in small groups instead of entire class groups. While both music and art teachers served all Follow Through classes, the speech teachers concentrated on the speech problems of the kindergarten and first grade pupils.

The four parent workers worked with the Follow Through social worker and directly under the Follow Through program assistant. They visited in the home of each eligible child, explained the Follow Through program, and attempted to enlist the active support of parents for the Follow Through Program.

The Title I aides served the non-Follow Through classes. One worked with the teachers in Pod II (corresponding to grade 3), the second worked with the teachers in Pod III (corresponding to grades 4 and 5), and the third served Pod IV (corresponding to grades 6 and 7).

All Pod IV pupils were in the science program. They were grouped into four equal groups on the basis of reading ability. Accordingly, there were approximately thirty pupils in each of the four groups, and they were divided as follows: (1) sixth and seventh grade reading levels, (2) fifth grade reading level, (3) fourth grade reading level, and (4) below fourth grade reading level.

Each level of pupils received science instruction at a specific period each day. The following textbooks were used with the four groups: Laidlaw's Science VI and Biological Sciences; Holt, Rinehart, and Winston's Modern Elementary Science, and Heath's Science in the Space Age.

The science room in which classes were held was equipped with portable lab tables, microscopes, hand magnifiers, science models, chemical and biological charts, and chemicals. Additional materials and supplies were made available when needed.

As a science learning experience, the pupils observed at the Piedmont Park greenhouse. In addition, the principal allowed pupils to conduct soil and planting experiments at designated stations in the community.

An on-going pupil activity was to keep an individual notebook in which the science experiments were described. Although there was a simple format for recording the information, the pupils described the experiments in their own words.

VIII. EVALUATION

Diagnosis

The performance of the Follow Through pupils was evaluated on the basis of the Follow Through Phonics Skills Test (PST), the Metropolitan Readiness Tests (MRT), the Metropolitan Achievement Tests (MAT), the Self Appraisal Inventory (SAI), and the Test of Attitudes of Children (TAC). The pupils were grouped for analysis on the basis of instructional level and Follow Through experience to determine if the number of years in the Follow Through Program influenced performance.

The Metropolitan Achievement Tests (MAT) was used to assess the reading and mathematics performance of the Follow Through and non-Follow Through pupils and the science performance of those pupils in the science program.

Attendance data was analyzed for the entire pupil population at Dean Rusk School, and the cost effectiveness of the instruction at each level was determined. In addition, a study was conducted by the Division of Research and Development to determine the effectiveness and acceptability of the reading and mathematics programs of Dean Rusk Elementary School.

Evaluation of the Performance of Follow Through Pupils

A. Phonics Skills

All Follow Through pupils were introduced to the Direct Approach to Decoding (DAD) Program during the year and were administered the Phonics Skills Test (PST) as posttest. There were 23 levels in the first chapter of the DAD program. The mean scores of the kindergarten pupils, which are listed in Table 1, indicated that the pupils had an introductory knowledge of phonics at the end of the school year.

TABLE 1

PHONICS SKILLS TEST
KINDERGARTEN

	Dean Rusk (N=33)	
	Mean Raw Scores	Level
Letter Sounds	2.52	7
Decoding	1.39	3
Auditory Blending	2.12	5
Oral Reading	0.76	5
Total	6.79	

The phonics objective for the pupils in levels corresponding to the first grade was a gain of 8 levels between the pretest and posttest. As seen in Table 2 on page 11, the objective was achieved in Letter Sounds and Oral Reading by the 13 pupils who had entered Follow Through in the first grade; the objective was achieved by the pupils who had participated in Follow Through kindergarten and first grade in Auditory Blending and Oral Reading. While the phonics performance of the Follow Through pupils who had participated in Follow Through kindergarten was higher on the posttest, it was not signficantly higher, and both groups of first grade pupils were performing at levels corresponding to Chapter I of the DAD Program. (There is only one chapter for Letter Sounds and five chapters each for the remaining categories of the DAD.)

TABLE 2

PHONICS SKILLS TEST

COMPARISON OF THE GAINS OF POD I (FIRST GRADE) PUPILS IN FOLLOW THROUGH FOR 1 AND 2 YEARS

PHONICS SKILLS	PUPILS IN FOLLOW THROUGH FOR 1 YEAR						PUPILS IN FOLLOW THROUGH FOR 2 YEARS					
		Pre		Post				Pre		Post		
SUBTESTS	No. of Pupils	Mean Raw Score	Level	Mean Raw Score	Level	Gain Level	No. of Pupils	Mean Raw Score	Level	Mean Raw Score	Level	Gain Level
	13						60					
Letter Sounds		3.00	7	5.62	15	8		4.45	10	7.43	17	7
Decoding		1.00	3	3.69	10	7		1.95	5	5.15	12	7
Auditory Blending		1.77	6	5.00	13	7		3.02	8	6.98	18	10
Oral Reading		0.15	0	3.92	11	11		1.15	5	6.98	18	13

The phonics objective for the Follow Through pupils in classes corresponding to the second grade was a gain of fifteen levels between pretest and posttest of the Phonics Skills Test (PST). The objective was not achieved by the three groups. (See Table 3 on page 13.)

The highest phonics performance on the posttest was achieved by the second grade level pupils who entered Follow Through in the second grade, but it must be noted that there were only four pupils in the group. In addition, while their performance was higher, it was not significantly higher than the performance of the other two second grade level groups.

The highest possible performance level in Letter Sounds was 23; all three second grade level groups were performing from levels 21-23. The second grade pupils in Follow Through for three years were performing at levels corresponding to Chapter II of the DAD on Decoding and both the second grade pupils in Follow Through for three years and those in Follow Through for two years were performing at levels corresponding to Chapter II of the DAD on Auditory Blending and Oral Reading.

B. Metropolitan Readiness Tests (MRT)

The first grade pupils were administered the Metropolitan Readiness Tests (MRT) in the Fall. The 102 pupils taking the test scored as follows: 2.0 per cent, A; 21.6 per cent, B; 42.2 per cent, C; 30.4 per cent, D; 3.9 per cent, E. In comparing the Follow Through pupils who had attended Follow Through kindergarten with those who had entered Follow Through in the first grade, a higher percentage of the Follow Through pupils who had attended Follow Through kindergarten scored "C" or above on the MRT. The percentages are listed in Table 4.

C. Metropolitan Achievement Tests (MAT)

The objective for the Follow Through first grade pupils who had attended Follow Through kindergarten was a score of at least first grade, six months on the Total Reading and Total Mathematics sections of the Metropolitan Achievement Tests (MAT). The percentages of pupils achieving the score are listed in Table 5 on page 14. While the objective was not met, a higher percentage of the pupils who had attended Follow Through kindergarten achieved the score of first grade, six months on both Total Reading and the Total Mathematics.

TABLE 3

PHONICS SKILLS TEST
COMPARISON OF GAINS OF POD II (SECOND GRADE) PUPILS IN FOLLOW THROUGH FOR 1, 2, AND 3 YEARS

PHONICS SKILLS	PUPILS IN FOLLOW THROUGH FOR 1 YEAR						PUPILS IN FOLLOW THROUGH FOR 2 YEARS						PUPILS IN FOLLOW THROUGH FOR 3 YEARS					
		Pre		Post				Pre		Post				Pre		Post		
SUBTESTS	No. of Pupils	Mean Raw Score	Level	Mean Raw Score	Level	Gain Level	No. of Pupils	Mean Raw Score	Level	Mean Raw Score	Level	Gain Level	No. of Pupils	Mean Raw Score	Level	Mean Raw Score	Level	Gain Level
	4						17						52					
Letter Sounds		10.00	23	9.75	23	0		8.12	19	8.94	21	2		8.29	19	8.83	21	2
Decoding		6.75	17	11.75	1(II)[a]	7		5.47	12	8.94	21	9		5.63	14	10.88	1(II)[a]	10
Auditory Blending		14.25	7(II)[a]	18.25	5(III)[a]	7		10.53	1(II)[a]	13.35	5(II)[a]	4		9.60	22	12.83	5(II)[a]	6
Oral Reading		8.75	21	15.50	1(III)[a]	12		5.18	14	13.88	5(II)[a]	14		6.21	16	14.67	7(II)[a]	14

[a]The Roman numeral in parenthesis refers to the Chapter number. If not indicated, the level was from Chapter I of the DAD.

TABLE 4

METROPOLITAN READINESS TESTS (MRT) VS.
FOLLOW THROUGH EXPERIENCE
POD I
(FIRST GRADE)

Years in Follow Through	No. of Pupils	Pupils Scoring "C" or Above on MRT	
		N	Per Cent
2*	80	55	68.8
1**	21	12	57.1
Total	101	67	66.3

*Attended Follow Through kindergarten and Follow Through first grade.

**Attended Follow Through first grade only.

TABLE 5

PERCENTAGES OF FOLLOW THROUGH POD I (FIRST GRADE) SCORING 1.6 OR ABOVE ON THE METROPOLITAN ACHIEVEMENT TESTS (MAT)

Years in Follow Through	No. of Pupils	Pupils Scoring 1.6 or Higher on Total Reading		Pupils Scoring 1.6 or Higher on Total Math	
		N	Per Cent	N	Per Cent
2	68	36	52.9	14	21.2
1	18	8	44.4	2	11.1
Total	86	44	51.1	16	19.0

An objective for the Pod II (second grade) pupils who participated in Follow Through was a gain of one month for each month in school on the Total Reading and Total Mathematics sections of the MAT. Since there were approximately six months between the pretest and posttest, a gain of 0.6 (grade equivalent score) was designated as fulfilling the objective.

All classes corresponding to the second grade at Dean Rusk School were administered the Metropolitan Achievement Tests (MAT), Primary I Battery as pretest and the Metropolitan Achievement Tests (MAT), Primary II Battery as posttest. The Primary I form consisted of five sections, the Primary II form consisted of nine sections. However, both forms had the Total Mathematics and Total Reading sections, and they were used for comparison in order to determine gains. The scores are listed in Table 6 on page 16.

The nine pupils who entered Follow Through in the second grade did not achieve the objective of one month gain for each month in school. Those who entered Follow Through in the first grade, thereby participating two years, achieved the gain of one month for each month in school in Total Mathematics. The pupils who had participated in Follow Through from kindergarten through grade two achieved the gain of one month for each month in school in Total Reading and Total Mathematics. In addition, the pupils who had participated in Follow Through for the entire three years scored highest (though not significantly higher than the other two groups) on the Total Reading and Total Mathematics sections of the MAT posttest.

D. Self-Concept

A small sample (75 Follow Through pupils from the 6 Follow Through schools) was administered the Self Appraisal Inventory (SAI). The scores were analyzed by grade level. However, because of the small sample, there were too few pupils from Dean Rusk School taking the inventory to analyze the scores separately.

The Test of Attitudes of Children (TAC) was administered to all Follow Through pupils by the Follow Through coordinator of assessment and development. After factor analysis of the test items, many items were deleted for the posttest. Although the scores were requested, the scores of neither the pretest nor the posttest were made available for the external evaluation of Research and Development by the Educational Evaluative Services (EES).

TABLE 6

COMPARISON OF METROPOLITAN ACHIEVEMENT TESTS (MAT) SCORES OF POD II (SECOND GRADE) PUPILS IN FOLLOW THROUGH FOR 1, 2, AND 3 YEARS -- 1971-72

		First Year in Follow Through			Second Year in Follow Through			Third Year in Follow Through		
		Pre	Post	Gain	Pre	Post	Gain	Pre	Post	Gain
Word Knowledge	Mean (G.E.)	1.66	2.21	0.34	1.55	2.05	0.50	1.59	2.20	0.63
	S.D.	0.39	0.49	--	0.28	0.51	--	0.44	0.63	--
	No. of Pupils	9	6	5	21	21	21	66	61	58
Word Analysis	Mean (G.E.)	1.59	2.03	0.28	1.43	1.76	0.33	1.49	1.90	0.43
	S.D.	0.44	0.02		0.39	0.52	--	0.42	0.71	--
	No. of Pupils	9	6		21	21	21	66	61	58
Reading	Mean (G.E.)	1.54	2.05	0.36	1.42	1.86	0.48	1.48	2.07	0.62
	S.D.	0.32	0.37	--	0.26	0.48	--	0.44	0.55	--
	No. of Pupils	9	6	5	20	21	21	66	61	59
Spelling	Mean (G.E.)		1.90			1.83			2.11	
	S.D.		0.51			0.62			0.89	
	No. of Pupils		6			21			61	
Math Computation	Mean (G.E.)		1.81			1.99			2.03	
	S.D.		0.55			0.55			0.57	
	No. of Pupils		7			21			61	
Math Concepts	Mean (G.E.)		1.96			1.99			1.99	
	S.D.		0.66			0.44			0.47	
	No. of Pupils		7			21			61	
Math Problems	Mean (G.E.)		2.39			2.29			2.28	
	S.D.		0.70			0.52			0.47	
	No. of Pupils		7			21			61	
Total Math	Mean (G.E.)	1.58	1.96	0.25	1.44	2.04	0.78	1.47	2.05	0.63
	S.D.	0.57	0.59	--	0.20	0.41	--	0.37	0.42	--
	No. of Pupils	9	7	6	20	21	20	67	61	59
Total Reading	Mean (G.E.)	1.62	2.12	0.30	1.51	2.00	0.49	1.55	2.15	0.62
	S.D.	0.32	0.41	--	0.24	0.42	--	0.36	0.51	--
	No. of Pupils	9	6	5	20	21	20	65	61	58

E. Parent Involvement

The parents of each eligible Follow Through child were visited during the school year. Parents were invited to Follow Through meetings, to visit the classroom, and to participate in parent volunteer groups. While one parent volunteered for service in the classroom on a regular basis, the majority of parent response was in serving as chaperones for pupils on trips to the dentist and physician or as chaperones on field trips.

F. Health Care

Each Follow Through eligible child was given dental and health check-ups during the school year. When necessary, dental work was performed. When illnesses occurred, pupils were taken to a pediatrician. The final health services report for Follow Through, which was included in the internal Follow Through final 1971-72 report, gave the data for Dean Rusk School. See Table 7 on page 18.

G. Psychological Service

Psychological service was provided for Follow Through eligible children by two Follow Through psychologists. Referrals were made by classroom teachers, the social workers, or other Follow Through staff when the need was recognized.

H. Independent Learning

A Follow Through objective was to enable pupils to become independent learners. A checklist was to be developed during the year to measure progress. However, the checklist is still in the developmental stage. Problems arose in attempting to isolate the behavioral characteristics of an independent learner.

Science Program

In the Pod IV there were 57 pupils at levels corresponding to grade six and 57 pupils at levels corresponding to grade seven in the science program for the entire year. The pretest, posttest, and gain grade equivalent scores are shown in Table 8.

TABLE 7

FOLLOW THROUGH HEALTH SERVICES FOR DEAN RUSK ELEMENTARY SCHOOL

Health Procedures	Pupils Assessed	Number of Pupils
Dental Care	Kindergarten	39
	New pupils (Grades 1-2)	61
Physical Examinations	Kindergarten and new pupils	96
Height and Weight	All pupils K-2	258
Hematocrits	Kindergarten, new pupils, Follow Through pupils with history of anemia	79
Tuberculin Test	As directed by public health department	160
Immunizations	Follow Through pupils as needs indicated	53
Urinalysis	Kindergarten and new pupils (Grades 1-2)	114
Vision Screening	All Follow Through pupils	115
Hearing Screening	All Follow Through pupils	96

TABLE 8

METROPOLITAN ACHIEVEMENT TESTS (MAT) SCIENCE
PRETEST, POSTTEST, AND GAIN SCORES

Levels	No. Pupils	Pretest Score	Posttest Score	Gain Score
Grade 6	57	4.69	4.80	.11
Grade 7	57	4.75	5.67	.92

The pupils in Pod IV were divided into four groups based on reading performance. The mean gain of the pupils at levels corresponding to grade six was 1.1 month during the six month period between the Metropolitan Achievement Tests (MAT) pretest and posttest. However, the mean gain of the pupils at levels corresponding to grade seven was 9.2 months during the six month period or approximately 1½ months gain for each month in the program.

Effectiveness-Acceptability Study

Dean Rusk Elementary School had both effective reading and effective mathematics programs during the 1971-72 school year, based on the Effectiveness-Acceptability Study conducted by the Division of Research and Development. The study, which utilized median Metropolitan Achievement Tests (MAT) pretest, posttest, and gain scores, was conducted in all the Atlanta Public Schools in order to compare the progress of pupils by school and by grade level, taking into account six factors which were believed to influence achievement. The factors were as follows:

A. Pretest scores.

B. Stability Index.

C. Per cent of paid lunches.

D. Pupil-teacher ratio.

E. Per cent of pupil attendance.

F. Per cent of pupils passing.

During the six month period between the Metropolitan Achievement Tests (MAT) pretest and posttest, the pupils at Dean Rusk School were predicted to gain, taking into account the six factors, from a low two months during the six months period in grade seven to a high six months during the six months period in grade four. (See Table 9 on page 20.)

Analysis of the test data revealed that the second (a Follow Through grade level), fourth, fifth, and seventh grades gained a hundred per cent or more of the predicted on the reading section of the Metropolitan Achievement Tests (MAT), indicating effective reading programs. The seventh grade, which was predicted to show a gain of only two months, actually gained five months or 250 per cent of the prediction, indicating the reading instruction at that grade level to be 250 per cent effective.

TABLE 9

EFFECTIVENESS-ACCEPTABILITY OF READING PROGRAM AT DEAN RUSK SCHOOL

Grade	MAT Scores		Gain		Gain Rate of Effectiveness		Index of Acceptability	
	Pre	Post	Actual	Predicted	1971-72	1970-71	1971-72	1970-71
2	1.4	2.0	0.6	0.3	200	150	74	78
3	1.8	1.9	0.1	0.4	25	67	51	68
4	2.3	3.1	0.8	0.6	133	25	66	64
5	3.4	3.9	0.5	0.5	100	150	68	75
6	4.1	4.3	0.2	0.4	50	300	64	64
7	4.1	4.6	0.5	0.2	250	100	60	56
				Average	126	132	64	68

While the overall reading program at Dean Rusk School was effective, attention must be given to the third and sixth grades which showed gains of only one and two months, respectively. These gains were less than predicted.

To be designated as acceptable, the mean performance of pupils by grade level had to be at the national norm, which on the Metropolitan Achievement Tests (MAT) was a score corresponding to the grade level of the pupils.

The second grade at Dean Rusk School showed the highest level of acceptability, 74 per cent, by performing at the second grade level (2.0) at the time of posttest. The lowest level of acceptability, 51 per cent, was in the third grade. The third grade median score on the posttest was first grade, nine months; this was a lower median reading level than the reading level of the pupils in the second grade.

The MAT mathematics data revealed the mathematics instruction at Dean Rusk School to be effective. (See Table 10 on page 21.) The overall effectiveness was 106 per cent of the prediction; the instruction in the second, third, fourth, and seventh grades was extremely effective (120 per cent or more of the prediction). The fifth and sixth grades gained less than predicted.

TABLE 10

EFFECTIVENESS-ACCEPTABILITY OF MATHEMATICS PROGRAM AT DEAN RUSK SCHOOL

Grade	MAT Scores Pre	MAT Scores Post	Gain Actual	Gain Predicted	Gain Rate of Effectiveness	Index of Acceptability
2	1.4	2.0	0.6	0.5	120	74
3	2.3	2.9	0.6	0.5	120	78
4	2.8	4.0	1.2	1.0	120	85
5	4.8	5.1	0.3	0.4	75	89
6	5.1	5.2	0.1	0.3	33	78
7	5.5	6.0	0.5	0.3	167	78
				Average	106	80

The overall acceptability of the Mathematics program at Dean Rusk School was 80 per cent. The indication was that the mathematics performance of the pupils was approaching the nation norm.

Mathematics performance was included in the study for the first time during the 1971-72 school year. The Effectiveness-Acceptability Study of 1970-71 was based on reading performance only. When comparing the reading performance of the pupils at Dean Rusk School in 1970-71 to the performance in 1971-72, the performance of the second, fourth, and seventh grades was more effective in 1971-72. However, the overall reading effectiveness dropped slightly, from 132 per cent to 126 per cent.

Career Opportunities Program (COP)

There was only one aide at Dean Rusk School, a Follow Through aide at the first grade level, who participated in the Career Opportunities Program (COP). Since the analysis of the progress of the Follow Through pupils was based on their years of experience in Follow Through rather than a comparison of class achievement at particular levels, the effect of the one COP aide at Dean Rusk School was not a component of the evaluation. However, in conjunction with COP, a random sample of teachers at Dean Rusk School was asked to complete the Organizational Climate Index (OCI) which was developed by George Stern of Syracuse University.

The Organizational Climate Index (OCI) consists of 300 true or false statements concerning the organizational climate of the school. The index is based on thirty need-press scales postulated by Henry A. Murrey and his associates of Harvard University in 1938. These scales are derived from six first-order Organizational Climate Index (OCI) factors. (The list is on page 1 of the Appendix.) Five of the six first order factors describe a second-order factor called "developmental press," which is the capacity of the organizational environment to support, satisfy, or reward self-actualizing behavior. The sixth first-order factor, impulse control, describes the second-order factor "control press," the characteristics of the environment which inhibit or restrict personal expressiveness.

The data on the climate at Dean Rusk School for a two-year period is included in Table 11 on page 23. The raw scores on the six factors were converted to standard scores. Therefore, the higher the score on each factor (including number 6) the more open the climate.

The 1971-72 mean scores were higher on Factors 2, 4, and 6, indicating that the teachers perceived the climate in those areas more open than during the previous year. The six factors are defined on page 2 of the Appendix.

In the general organizational climate study of the twenty-eight Atlanta Public Schools with COP aides, an intercorrelation matrix including the OCI factors, reading achievement scores, and per cent of attendance was computed. No significant correlation was found between the degree of openness of climate and achievement.

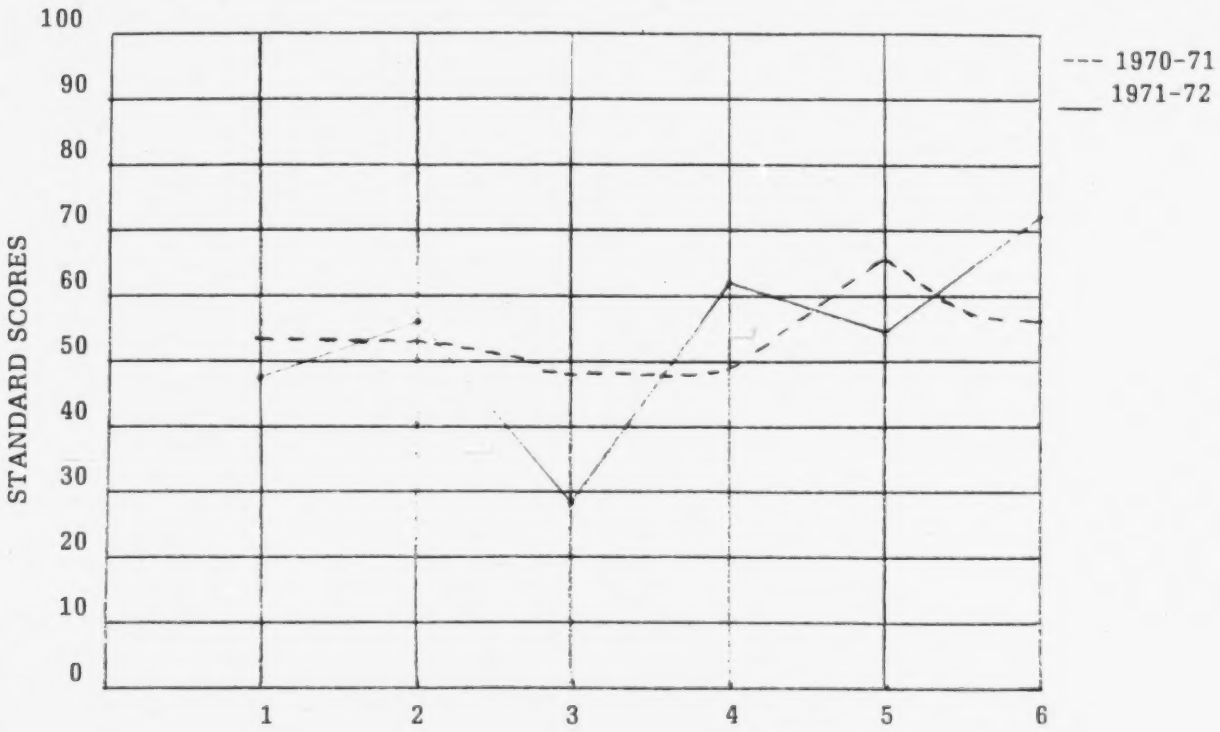
Pupil Attendance

The overall average daily attendance (ADA) at Dean Rusk School was 69.5. The highest ADA was in the second grade with 98 pupils. The ADA in grades four through seven ranged from 53 pupils to 60 pupils. (See first item of Table 12 on page 25.)

The per cent of pupil attendance ranged from 89 per cent in grade seven to 93 per cent in grades four, five, and six, with an overall average of 92.4 per cent. The city-wide attendance average was 91.3 per cent during 1971-72.

TABLE 11

SCHOOL PROFILE OF STANDARD FACTOR SCORES ON
THE ORGANIZATIONAL CLIMATE INDEX



IX. COST ANALYSIS

A cost analysis was performed to determine the relative cost for one grade unit of reading gain based upon the rate of reading gain for 1971-72 and the amount spent. Data from Atlanta Public Schools, General Funds Report, July, 1972, and the Trust and Agency Report, June, 1972, were used. Included were general funds and compensatory funds from special projects.

The cost analysis of the reading gain is reported in Table 12 on page 25. According to the analysis, the gain was not related to the amount of funds spent. The per pupil cost for one grade unit of gain varied from $578.45 in grade three to $2,676.56 in grade six, with an average of $960 in grades two through seven.

In addition to determining the per pupil costs for one grade unit of gain, the cost for each unit of effectiveness as defined by the 1972 Effectiveness-Acceptability Study was computed. The reading program at Dean Rusk School was effective, and the average cost for a unit of effectiveness was $7.04.

X. CONCLUSIONS

To avoid confusion in the interpretation of the results of the Effectiveness-Acceptability Study in comparison with the Cost Analysis of the Dean Rusk Reading Program, it must be remembered that the Effectiveness-Acceptability Study was based on the median scores of all pupils taking the Metropolitan Achievement Tests (MAT) pretest and/or posttest. The cost analysis utilized the mean scores of only the pupils who attended Dean Rusk Elementary School for the entire year, taking both the MAT pretest and posttest. However, even though the two approaches were taken to analyze the pupil performance, the findings of the two studies were similar except at the instructional levels corresponding to the third grade. At those levels it was found that the reading instruction was ineffective; the median gain was only one month during the six month period. However, when the pupils who took the pretest only and the pupils who took the posttest only were excluded, and the scores of the pupils who took both the pretest and the posttest were analyzed, it was found that the pupils gained at the rate of 137 per cent (more than one month for each month in the program).

TABLE 12

COST ANALYSIS OF READING GAINS OF GRADES
TOTAL SCHOOL AVERAGE DAILY ATTENDANCE (ADA)
K -- 7 = 545

	GRADES						
	Second	Third	Fourth	Fifth	Sixth	Seventh	Average
ADA	98	83	54	60	53	59	69.5 (Total = 407)
Per Pupil Cost							
A. General Funds							
1. Regular							
a. Salary	$ 611.00	$611.00	$611.00	$611.00	$ 611.00	$611.00	$611.00
b. Non-salary	95.81	95.81	95.81	95.81	95.81	95.81	95.81
c. TOTAL GENERAL FUNDS	$ 706.81	$706.81	$706.81	$706.81	$ 706.81	$706.81	$706.81
B. Compensatory Funds							
1. Follow Through							
a. Salary	$ 408.02						$408.02
b. Non-salary	77.22						77.02
c. TOTAL FOLLOW THROUGH	$ 485.24						$485.24
2. Title I							
a. Salary	$ 30.76	$ 78.47	$ 67.42	$ 63.76	$ 62.19	$ 64.32	$ 59.25
b. Non-salary	0.93	0.93	0.93	0.93	0.93	0.93	0.93
c. TOTAL TITLE I	$ 31.69	$ 79.40	$ 68.35	$ 64.69	$ 63.12	$ 65.25	$ 60.18
3. National Teacher Corps							
a. Salary	$ 5.25	$ 5.25	$ 5.25	$ 5.25	$ 5.25	$ 5.25	$ 5.25
b. Non-salary	-0-	-0-	-0-	-0-	-0-	-0-	-0-
c. TOTAL TEACHER CORPS	$ 5.25	$ 5.25	$ 5.25	$ 5.25	$ 5.25	$ 5.25	$ 5.25
4. Title IV-A							
a. Salary	$ 0.34	$ 0.34	$ 0.34	$ 0.34	$ 0.34	$ 0.34	$ 0.34
b. Non-salary	0.68	0.68	0.68	0.68	0.68	0.68	0.68
c. TOTAL TITLE IV-A	$ 1.02	$ 1.02	$ 1.02	$ 1.02	$ 1.02	$ 1.02	$ 1.02
5. Total Compensatory Funds							
a. Salary	$ 444.37	$ 84.06	$ 73.01	$ 69.35	$ 67.78	$ 69.91	$160.73
b. Non-salary	78.83	1.61	1.61	1.61	1.61	1.61	19.76
c. TOTAL COMPENSATORY FUNDS	$ 523.20	$ 85.67	$ 74.62	$ 70.96	$ 69.39	$ 71.52	$180.49
C. Rate of Reading Gain (Per Cent)	0.94	1.37	---	0.87	0.29	0.85	0.92
D. Projected Cost for One-Grade-Unit of Gain							
1. General Funds	$ 751.93	$515.92	---	$812.42	$2,437.28	$831.54	$768.27
2. Compensatory Funds	556.60	62.53	---	81.56	239.28	84.14	196.19
3. TOTAL PROJECTED COST FOR ONE-GRADE-UNIT OF GAIN	$1,308.53	$578.45	---	$893.98	$2,676.56	$915.68	$964.46
E. Gain Rate of Effectiveness	200	25	133	100	50	250	126
F. Expenditure per ADA of Compensatory Funds for Each Unit of Effectiveness							
1. General Funds	$ 3.53	$ 28.27	$ 5.31	$ 7.07	$ 14.14	$ 2.83	$ 5.61
2. Compensatory Funds	2.62	3.43	0.56	0.71	1.39	0.29	1.43
3. TOTAL EXPENDITURE PER ADA OF COMPENSATORY FUNDS FOR EACH UNIT OF EFFECTIVENESS	$ 6.15	$ 31.70	$ 5.87	$ 7.78	$ 15.53	$ 3.12	$ 7.04

The performance of the Follow Through children in levels corresponding to the first and second grades was analyzed on the basis of the number of years the pupils had participated in Follow Through. There was no significant difference in phonics skills performance based on Follow Through experience.

Sixty-nine per cent of the Follow Through first grade level pupils who had attended Follow Through kindergarten compared with fifty-seven per cent of Follow Through first grade level pupils who had not attended Follow Through kindergarten scored "C" or above on the Metropolian Readiness Tests (MRT). Fifty-three per cent compared with forty-four per cent of the pupils, respectively, scored at grade level on the Total Reading section of the MAT; twenty-one per cent compared with eleven per cent, respectively, scored at grade level on the Total Mathematics sections of the MAT. Therefore, at the first grade level, the performance of the pupils who had attended Follow Through kindergarten was consistantly better.

At the second grade level, the pupils who had participated in Follow Through from kindergarten through the second grade level achieved the greatest reading gain between the MAT pretest and posttest. However, there was no significant difference in the MAT posttest scores of the pupils based on Follow Through experience.

The Pod IV science program at Dean Rusk Elementary School was very effective at the levels corresponding to the seventh grade, the pupils gained 1.5 months in science knowledge for each month in the program. Additional attention, however, should be given to pupils at levels corresponding to grade six; they did not achieve the expected gain.

When viewing the school as a whole, it was found that the per cent attendance of the pupils at Dean Rusk Elementary School was higher than the city-wide attendance average. The climate at Dean Rusk School, as viewed by the teachers, was open in all area except practicalness, which is defined as an environmental dimension of practicality tempered with friendliness.

XI. RECOMMENDATIONS

Based on the results of test data and information from the educational staff of Dean Rusk Elementary School, the recommendations are as follows:

A. Continue the science program with special focus on levels corresponding to grade six.

B. Give attention to the reading problems of the pupils in grade six which were indicated by both the Effectiveness-Acceptability Study and the Cost Analysis of the Reading Program.

C. Group the Follow Through pupils according to Follow Through experience so that the effects of the Follow Through instructional program will not be "washed out" after the first grade.

D. Define Follow Though objectives in behavioral and not process terms.

APPENDIX

MURRAY'S NEED-PRESS SCALES

1. Abasement-assurance: self-deprecation versus self-confidence
2. Achievement: striving for success through personal effort
3. Adaptability-defensiveness: acceptance of criticism versus resistance to suggestion
4. Affiliation-rejection: friendliness versus unfriendliness
5. Aggression-blame avoidance: hostility versus disorganization

6. Change-sameness: flexibility versus routine
7. Conjunctivity-disjunctivity: planfulness versus organization
8. Counteraction-inferiority avoidance: restriving after failure versus withdrawal
9. Deference-restiveness: respect for authority versus rebelliousness
10. Dominance-tolerance: ascendance versus forbearance

11. Ego Achievement: striving for power through social action
12. Emotionality-placidity: expressiveness versus restraint
13. Energy-passivity: effort versus inertia
14. Exhibitionism-inferiority avoidance: attention-seeking versus shyness
15. Fantasied achievement: daydreams of extraordinary public recognition

16. Harm avoidance--risk-taking: fearfulness versus thrill seeking
17. Humanities-social sciences: interests in the humanities and the social sciences
18. Impulsiveness-deliberation: impetuosity versus reflection
19. Narcissism: vanity
20. Nuturance-rejection: helping others versus indifference

21. Objectivity-projectivity: detachment versus superstition (AI) or suspicion (EI)
22. Order-disorder: compulsive organization of details versus carelessness
23. Play-work: pleasure-seeking versus purposefulness
24. Practicalness-impracticalness: interest in pratical activities versus indifference
25. Reflectiveness: introspective contemplation

26. Science: interest in the natural sciences
27. Sensuality-puritanism: interest in sensory and aesthetic experiences
28. Sexuality-prudishness: heterosexual interests versus inhibitions of heterosexual interests
29. Supplication-autonomy: dependency versus self-reliance
30. Understanding: intellectuality

ORGANIZATIONAL CLIMATE INDEX FACTORS

A. Development Press

1. Intellectual climate -- This factor describes a concern with intellectual activity, social action, and personal effectiveness. It is based on the scales for humanities, social science, science, reflectiveness, understanding, fantasied achievement, exhibitionism, and change. A school that scores high on this factor is one in which there is a high degree of intellectuality, heterosexual interests, flexibility, and attention seeking.

2. Achievement standards -- This is the factor reflecting press for achievement. Schools high on this factor stress hard work, perseverance, and a total day-by-day commitment to institutional purposes. It is defined by counteraction, energy, achievement, emotionality, and ego achievement.

3. Practicalness -- This factor suggests an environmental dimension of practicality tempered with friendliness. It is defined by practicalness and nurturance. A school that scores high on this factor is one in which the teachers feel there is high interest in practical activity and a desire for helping others.

4. Supportiveness -- This factor deals with aspects of the organizational environment that respect the integrity of the teacher as a person, but the implication is that dependency needs must be supported rather than personal autonomy emphasized. It might be considered a measure of democratic paternalism. The scales defining it are assurance, tolerance, objectivity, affiliation, conjunctivity, supplication, blame avoidance, harm avoidance, and nurturance. A school that scores high on this factor is one in which the teachers feel a high degree of self-confidence, friendliness, and planfulness.

5. Orderliness -- The components of this factor are concerned with the press for organizational structure, procedure, orderliness, and a respect for authority. Conformity to community pressures and an effort to maintain a proper institutional image probably are also concomitants of a high score on this factor. It is based on order, narcissism, adaptability, conjunctivity, deference, and harm avoidance. A school that scores high on this factor is one in which the teachers feel there is a compulsive organization of details, acceptance of criticism, respect for authority, vanity, and planfulness.

B. Control Press

In addition to the reflection of factors 1 and 2 under Development Press, Control Press involves:

Impulse control -- This factor implies a high level of constraint and organizational restrictiveness. There is little opportunity for personal expression or for any form of impulsive behavior. It is based on work instead of play; prudishness versus sexuality; aggression versus blame avoidance; impulsiveness versus deliberation; emotionality versus placidity; and exhibitionism versus inferiority avoidance. A school that scores high on this factor is one in which the teachers feel there is a high degree of purposefulness, heterosexual interests, hostility, impetuosity, expressiveness, and restriving after failure.

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RESEARCH AND DEVELOPMENT REPORT

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GOLDSMITH ELEMENTARY SCHOOL

1971-72

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I. RATIONALE

Goldsmith Elementary School is located in the northwest section of Atlanta. The enrollment for the year 1971-72 included approximately 221 pupils in kindergarten through the seventh grade. The mobility index for the 1971-72 school year was .36, which indicated that over one-third of the school population moved either in or out during the year. The 1970-71 mobility index at .41 was also rather high, which indicated that the student population at Goldsmith is highly mobile.

The per cent of attendance for 1971-72 at Goldsmith was 90.9, which was just below the city-wide score of 91.3 per cent. This showed a slight increase over the 1970-71 per cent of attendance at 90.7. In 1969-70 the per cent of attendance was 87.2. Attendance has continued to be somewhat of a problem at Goldsmith, but obviously worthwhile progress has been made over the last three years.

Goldsmith Elementary has maintained a stable racial balance over the past several years with a ratio of approximately 45% black and 55% white pupils. This balance is also characteristic of the community. The community from which the Goldsmith pupils come consists mainly of low income single family dwellings, which are rented by the residents.

Based on the fact that an estimated 61.4 per cent of the pupils enrolled in Goldsmith Elementary come from families with an annual income of $2,000 or less, this school qualifies to receive supplementary funds and additional personnel through Title I grant allocations. The children at Goldsmith have exhibited a need to improve academic performance in reading and mathematics, have generally low self-concept and attitude toward school, and poor attendance habits. Thus, these were the main areas of interest in the 1971-72 school year.

Supporting Services

Through the provisions of the Atlanta Public Schools' regular budget and special federally funded projects, the following compensatory and enrichment resources supplemented the regular school program.

A. Title I Program

The following staff were provided through ESEA Title I funds:

1. Lead Teacher - The lead teacher performed varied duties in relation to improving the reading instructional program. This included assisting teachers with grouping pupils for reading instruction and periodic evaluation of pupils to maintain proper grouping in accordance with the individual pupil's progress. The lead teacher also supervised the testing program in the school and assisted teachers in interpreting test results; in addition she ordered materials and supplies and made these available to teachers as needed. At intervals throughout the year the lead teacher tutored individuals or small groups who exhibited extreme reading difficulty, and assisted teachers by demonstrating in the classroom a particular skill, which the teacher felt insecure in teaching.

2. Educational Aides - Title I educational aides were assigned on the basis of enrollment. There were two educational aides assigned to Goldsmith. The aides worked under the direction of the principal and lead teacher, who assigned them to teachers on an equal time basis with the exception of one aide who worked exclusively with the kindergarten while it was in session. When the aides were assigned to a particular teacher,

the aides performed whatever tasks were required by that teacher.

3. Social Worker - The social worker was primarily involved in activities to improve attendance. She visited in the homes of all families who had children attending Goldsmith. In addition, she made special visits to those pupils who often were absent from school. The social worker also helped provide transportation for those pupils who required special health services.

B. Comprehensive Instructional Program (CIP)

This program was directed toward improving achievement in reading and, for the first time this year, also in mathematics. The program provided diagnostic tests in reading three times during the school year in grades 1 - 3. Mathematics diagnostic testing was conducted only once during the year in grades 5 - 7. The purpose of the testing was to provide immediate feedback to the teachers, which could assist them in pinpointing the strengths and weaknesses of the pupils. CIP resource personnel were available from each area office and from the Instructional Services Center to assist teachers with problems encountered in the teaching of reading and mathematics.

II. NEEDS OF PUPILS

The needs of the pupils were identified by the school staff as follows:

A. To have their basic health needs, especially dental, diagnosed and treated.

B. To be motivated to attend school regularly.

C. To correct academic deficiencies, especially in the areas of

reading and mathematics.

D. To improve self-concept and attitude toward school.

E. To involve more parents in school activities.

III. GOALS OF THE PROGRAM

The following goals were based on the needs identified above:

A. To eliminate health problems of the pupils.

B. To improve the attendance of the chronically absent pupils and to improve the overall percentage of attendance.

C. To improve academic performance in mathematics and reading.

D. To increase positive self-concepts and positive attitude toward school.

E. To increase parental involvement in school activities.

IV. PERFORMANCE OBJECTIVES

The activities of the program were directed toward realization of the following objectives:

A. To identify and remediate health problems in the following areas:

1. Tuberculosis Remediation - 100 per cent of the pupils with positive results on the tuberculosis test will be treated and dismissed by a doctor.

2. Dental Remediation - 75 per cent of the pupils who are identified as having cavities will be treated and dismissed by a dentist.

3. Visual Remediation - 90 per cent of the pupils with visual difficulties will have the deficiencies eliminated.

4. Hearing Remediation - 90 per cent of the pupils with hearing

difficulties will have the deficiencies eliminated.

B. To improve attendance in the following two manners:

1. To increase the school attendance record to the city-wide per cent of attendance.

2. To decrease the number of absences of those pupils who are in the lowest decile of attendance by 50 per cent.

C. To achieve an average of five months gain in mathematics and reading for six months of instruction. Only those pupils in the Comprehensive Instructional Program (CIP) were included in the objective (Grades 1, 2, and 3 for reading and 5, 6, and 7 for mathematics).

D. To measure self-concepts and attitude toward school for each class at Goldsmith. Remedial action will be taken for classes which fall into the lower quartile.

E. To increase parental participation in the following areas:

1. 80 per cent of the parents of kindergarten and first grade pupils will have a conference with the appropriate teacher; the conference may be personal or via telephone.

2. To have a minimum of 40 parents attend each of the regular PTA meetings.

V. CRITICAL VARIABLES

A. Health Problems

1. Tuberculosis

2. Dental

3. Visual

4. Hearing

B. Attendance

1. Chronically absent pupils

2. Overall school attendance

C. Reading Skills

1. Word Knowledge

2. Word Analysis

3. Comprehension

D. Mathematics Skills

1. Mathematics Computation

2. Mathematics Concepts

3. Mathematics Problem Solving

E. Self-Concept

1. In relation to peers

2. In relation to family

3. In relation to school

4. General

F. Attitude Toward School

1. Attitude toward teacher

2. Attitude toward learning

3. Attitude toward school subjects

4. Attitude toward school social structure and climate

5. Attitude toward peers

6. General

G. Parental Involvement

VI. MANAGEMENT AND CONTROL

A. Personnel

The Goldsmith faculty consisted of the following fulltime and parttime positions:

No.	Title	Fulltime	Parttime	Source of Funds
1	Principal	X		General
10	Classroom Teachers	X		General
1	Lead Teacher	X		Title I
1	Social Worker	X		Title I
2	Educational Aides	X		Title I
1	Speech Teacher		.1	General
1	Music Teacher		.4	General
1	Band Teacher		.1	General
1	Physical Education Teacher		.4	General
1	Teacher of Emotionally Disturbed Pupils	X		General
1	Librarian	X		General

The two educational aides were assigned as follows: one worked with the kindergarten teacher during the morning when the kindergarten pupils were in school and during the afternoon she was assigned to assist other teachers; the second aide was assigned by the principal and lead teacher to assist the teachers in grades 1 - 7 on an equal time allotment basis.

The social worker was primarily concerned with improving and maintaining pupil attendance. She visited in the homes of the ninety-eight families who had at least one child at Goldsmith. She was assisted in her attendance effort by an Economic Opportunity Atlanta (EOA) volunteer who also visited in the homes of absentee pupils.

Supportive persons from the area office and the Instructional Services Center were responsive to any request from Goldsmith for assistance. Most of the contact initiated by these supportive persons was in the form of scheduling test dates for the Metropolitan Achievement Tests (MAT) and for the Comprehensive Instructional Program (CIP). There was no outside inservice in reading and the only assistance in mathematics resulted from a request by the lead teacher to have an inservice session with the faculty members responsible for the mathematics program at Goldsmith.

B. Materials and Supplies

As a result of classification as a Title I school, Goldsmith received $210.00 for materials and supplies. This allocation was based on a base rate of seventy-five cents per pupil. In addition, fifty dollars for materials and supplies was allotted to the social worker, who was also employed under Title I funds.

C. Staff Development

The Goldsmith faculty was involved in several aspects of staff development. Although regular faculty meetings were held once a month, there were other meetings held for specific purposes. For example, a faculty meeting was held to discuss the contents of the school prospectus for 1971-72. The principal and the lead teacher were in constant contact with the classroom teachers and met many of their needs on an individual basis. Also, at least three faculty members were involved in graduate work.

VII. PROCESS

Reading was taught daily in each classroom at Goldsmith Elementary School. Each classroom was self-contained, but pupils were grouped for reading instruction. There were a total of 35 reading groups consisting of two or more children in grades 1 - 7. In a few cases where a pupil did not fit into any group, the pupil read individually. The teachers were assisted by the lead teacher in arranging grouping; in addition, the lead teacher checked the reading level of incoming pupils to aid in their placement in the proper reading groups. Once grouping was established, it was flexible so that a pupil who made more or less progress than the group could be placed in a group more suited to his ability.

A small number of pupils, who had fallen far behind in reading level, were tutored individually by the lead teacher. Two seventh grade pupils, who were being tutored by the lead teacher, were trained to work individually with six second graders, who were making slow progress in reading. This procedure worked well for approximately two months until both tutors and tutees tired of the arrangement. Late in the year, the second graders, who had previously been tutored by the seventh graders, were tutored by two adult tutors for 1/2 hour two days during the week. The two adult tutors had recently completed a course in teaching reading skills, which was offered by Literacy Action, Inc.

Teachers in grades 1 - 3 were aided in the teaching of reading skills by the results of the CIP reading diagnostic tests. This test was administered three times throughout the year. The major purpose of the CIP testing was to give the teachers periodic informal evaluations of pupils' strengths and weaknesses on reading skills. Using the results of the test, the teachers could pinpoint their instruction toward filling

in skill gaps of specific children. The teachers at Goldsmith did find the CIP testing helpful in pinpointing weaknesses in reading skills. CIP testing is designed so as to offer immediate feedback of the test results to the teachers. Unfortunately, this was not the case in the first CIP test in the fall; however, adjustments in the test schedule to test by areas instead of the entire school system at once resulted in a two week turnaround of results for the final two evaluations.

Attendance

Efforts to reduce absenteeism were carried out by the social worker and Economic Opportunity of Atlanta (EOA) field workers. Goldsmith was one of three inner-city schools to cooperate with an EOA project aimed at reducing the number of absentees in these schools. The EOA field workers went to each house every day to contact the parent whenever a child was absent, unless the parent had called the school to inform the principal of the reason for the child's absence. For each visit a contact form was filled out stating the reason for the absenteeism. During the course of the project, it was found that lack of proper clothing and frequent illness loomed as major reasons for absenteeism. Thus donations of clothing and free medical assistance were obtained by EOA in order to alleviate this problem.

The social worker also made visits to homes of children who were frequently absent to encourage them to attend school. There was a monthly competition among the classes at Goldsmith with a trophy being given to each class with 100 per cent attendance.

Health

Health activities included screenings and referrals for various health needs. A dental hygenist cleaned the teeth of all the pupils and identified all those having cavities as needing referral to a dentist. A Fulton County health nurse administered a skin TB test to all Goldsmith

pupils in kindergarten, first, and seventh grades and recommended x-rays for those pupils who had a positive skin test. The PTA health chairman administered a visual test to all the pupils and made referrals to a Fulton County health nurse for further testing. Whenever necessary, pupils were referred to the appropriate visual correction authority. A hearing test was administered to all second and fifth graders, plus others who were suspected of having hearing difficulty. Referrals were made when appropriate.

Parental Involvement

Activities to increase parental participation in school functions took two directions. An increased effort was made by the kindergarten and first grade teachers to help the parents become aware of their children's progress, as well as the school program, through conferences with the parents and periodic parental meetings. Possibly involvement during the child's early school years will result in increased interest and involvement in later years. In addition, effort was made to increase attendance at the monthly PTA meetings. Since the time of the meeting presented a problem for some parents, the meetings were alternated between afternoon and evening in order to provide a convenient time for all parents to attend. At each meeting there was an opportunity for the parents to talk with their child's teacher.

VIII. EVALUATION

The Metropolitan Readiness Tests (MRT) and the Metropolitan Achievement Tests (MAT) were used to assess achievement in reading and mathematics. The MRT was administered as the pretest to all first grade pupils. The MAT was administered as the posttest to the first and fourth

grades, and as the pre- and posttest to grades two, three, five, six and seven. Pretests were administered in October, 1971 and posttests in April, 1972. The fourth grade was administered the Iowa Test of Basic Skills (ITBS) in October, 1971 as part of the statewide testing program. Results of the ITBS were not used in the evaluation.

The Self-Appraisal Inventory (SAI) and School Sentiment Index (SSI) were administered to obtain baseline data on pupil self-concept and attitude toward school. The tests were administered to pupils in kindergarten through sixth grade in February, 1972. The SAI gives a measure of pupils' favorable responses to questions concerning the pupils' relationship to peers, family, and school, as well as general self-concept. The SSI measures the pupils' positive responses to questions relating to the teacher, school subjects, school social structure and climate, learning, school peers, and to school in general.

Goldsmith's per cent of attendance for the 1971-72 school year was compared against the city-wide average to determine the difference, if any. Attendance records were used to determine changes in attendance for those pupils in the lowest decile of attendance.

Records kept by the lead teacher, social worker, principal, or teachers were used to assess objectives relating to health and parental participation.

IX. FINDINGS

The report of findings took three directions. First, evaluation of the specific performance objectives for Goldsmith School will be discussed. Second, general performance information for the entire school will be presented. Finally, data obtained during the past two years will

be analyzed for differences and trends.

The extent of attainment of the specific performance objectives was as follows:

A. Achievement of Health Objective

The health objective had several different areas for identification and remediation of health problems. The degree of success in achieving goals differed in each area.

1. After the administration of the tuberculosis skin test to pupils in the kindergarten, first and seventh grades, twelve pupils were recommended for chest x-rays because of a positive skin test. All twelve received chest x-rays, and futhermore one pupil was prescribed medication based on the results of the x-rays. Thus, this objective was accomplished.
2. After the examination of all the Goldsmith pupils by a dental hygenist, seventy-five pupils were identified as in need of dental treatment. Only twenty-five pupils (or 33%) obtained dental certificates signifying that they had been released by a health department dentist. This was short of the 75 per cent goal of completion of dental care that had been set. The main problem in failing to meet this objective was the lack of a means of transporting pupils to and from the health department, where the pupils' dental problems are corrected. Parents were either unwilling or uninterested in aiding with this transportation. While the social worker assumed the responsibility of transporting pupils to the health clinic, the social worker incurred an injury which hampered her activity in this area. Goldsmith School was allotted three months for

making visits to the clinic; however, as a result of the social worker's injury, one of the months was changed to June, 1972. Naturally, this month could not be used because school was not in session at the time. Thus, only two of the three months for visiting the clinic could be utilized, and less pupils were afforded the opportunity of visiting the clinic.

3. The visual test was administered to all the pupils at Goldsmith with sixteen identified as needing a more thorough examination by a physician. Of the sixteen pupils identified, only five saw a physician. Of the five who were seen by a physician, only four had the physician's recommendation completed. Thus, only twenty-five per cent of the pupils identified as needing assistance actually followed through to completion of the recommendation. This fell short of the goal of having deficiencies eliminated for ninety per cent of the pupils with visual difficulties. Again, the lack of cooperation by parents in taking or sending children for the examinations or fittings for glasses was considered to be the cause for not achieving this objective.
4. From the hearing tests administered to pupils in the second and fifth grades and others suspected of having hearing difficulties, only one was identified as needing assistance. The nurse who visited Goldsmith worked with the child to alleviate the problem. Thus, the objective for diagnosing and eliminating hearing difficulties was attained.

B. Attendance

The focus on attendance for the 1971-72 school year had two

directions and, accordingly, two specific performance objectives. The results of these objectives were as follows:

1. The first objective was to raise the school attendance record to the city-wide per cent of attendance. Goldsmith fell just short of this objective as the per cent of attendance for Goldsmith during the 1971-72 school year was 90.9, while the city-wide per cent of attendance for the same period was 91.3. Goldsmith's per cent of attendance was increased from 90.7 per cent for the 1970-71 school year; whereas, the city-wide per cent of attendance decreased from 93 per cent the previous year.
2. The second attendance objective was aimed at lowering the rate of absenteeism of those pupils who were chronically absent. The school social worker identified the 26 pupils (the lowest decile), who had the worst attendance records. The number of absences for each pupil during the first and last sixty days of the school year were compared to determine whether the concentrated efforts of the social worker and the EOA field worker had resulted in a fifty per cent decrease in the number of absences for this group. The results are presented in Table 1.

TABLE 1

COMPARISON OF THE AVERAGE NUMBER OF ABSENCES DURING THE FIRST AND LAST 60 DAYS FOR PUPILS IN THE LOWEST DECILE OF ATTENDANCE

N	Average Number of Absences First 60 Days	Average Number of Absences Last 60 Days	Change	Per Cent Change
26	10.4	8.1	-2.3	-22%

As indicated in Table 1, there was a 22 per cent decrease in the average number of absences during the last sixty day period. This was short of the goal of a fifty per cent decrease, but still presented some progress in reducing absenteeism. That some decrease in number of absences occurred seems important in that generally attendance goes down during the latter part of the school year and also the chronic absentees seem to be the ones less likely to respond to encouragement to attend school more regularly.

In addition to the progress made in reducing absenteeism among the most chronically absent pupils, the report on Economic Opportunity Atlanta's school absentee project indicated for Goldsmith a decrease in average daily absenteeism for the entire school from 29 in the 1970-71 school year to 21 in the 1971-72 school year. This represented a decrease of 28 per cent in average daily absenteeism. However, it also must be taken into account that the enrollment for Goldsmith dropped from 291 in 1970-71 to 229 in 1971-72, a decrease of 21 per cent. Thus,

considering the decrease in enrollment, one would expect a decrease in the average daily number of absentees. However, the per cent of decrease in average daily absenteeism did exceed the per cent of decrease in enrollment indicating that there was progress made in the effort to reduce absenteeism. Still, the problem was not eradicated.

C. Mathematics and Reading Achievement

Achievement objectives in the areas of reading and mathematics were assessed by comparing pupils' scores on the MAT tests administered in October, 1971 and April, 1972. The objective was to obtain an average of five months gain in reading in grades 1, 2, and 3 and five months gain in mathematics in grades 5, 6, and 7. There were approximately six months between the pre- and posttests.

First grade pupils were administered the Metropolitan Readiness Tests as a pretest. This test does not yield a grade equivalent score; instead, a letter rating, which indicates the pupil's readiness for first grade work, is assigned according to the pupil's total score. Table 2 gives the range of scores on the MRT, the interpretation of each letter grade, and the distribution of scores of the first grade pupils at Goldsmith.

TABLE 2

DISTRIBUTION OF LETTER RATING AND READINESS STATUS CORRESPONDING TO VARIOUS RANGES OF TOTAL SCORE ON THE METROPOLITAN READINESS TESTS

FIRST GRADE

Number of Pupils	Score Range	Letter Rating	Readiness Status	Significance
1	Above 76	A	Superior	Apparently very well prepared for first grade work. Should be given opportunity for enriched work in line with abilities indicated.
10	64-76	B	High Normal	Good prospects for success in first grade work, provided indications, such as health, emotional factors, etc., are consistent.
12	45-63	C	Average	Likely to succeed in first grade work. A careful study should be made of the specific strengths and weaknesses of pupils in this group and their instruction planned accordingly.
3	24-44	D	Low Normal	Likely to have difficulty in first grade work. Should be assigned to slow section and given more individualized help.
0	Below 24	E	Low	Chances of difficulty high under ordinary instructional conditions. Further readiness work, assignment to slow section, or individualized work is essential.

According to the rating on the MRT, pupils who score "C" or better on the MRT should experience success in the first grade. Since it is not possible to compute a strict gain score for the first grade pupils, in accordance with the objective set forth it was considered that pupils who scored "C" or better on the pretest should have scored 1.5 or better on the posttest. In evaluating the progress of the first grade pupils, only the pupils who took both the pre- and posttests were used. Table 3 shows the progress made by both those pupils who made "C" or above and those who made "D" or below on the MRT. As shown in Table 3, of the 23 pupils who scored "C" or above on the pretest, 21 (91%) scored 1.5 or above on the posttest. Also, one pupil who scored "D" or below on the pretest scored 1.5 or above on the posttest. Since 91 per cent of the first graders scored as specified by the objective, the reading achievement goal for the first grade was met.

TABLE 3

A COMPARISON OF THE GRADE EQUIVALENCE AS MEASURED BY THE METROPOLITAN ACHIEVEMENT TESTS OF PUPILS WHO SCORED "C" OR ABOVE ON THE METROPOLITAN READINESS TESTS WITH THOSE WHO SCORED "D" OR BELOW

FIRST GRADE

Group	Total Number	Grade Equivalence on the MAT	
		1.5+	1.0-1.4
Scored "C" or Above on the MRT	23	21	2
Scored "D" or Below on the MRT	3	1	2
Total	26	22	4

For grades two and three the MAT was administered in October, 1971 and April, 1972. Therefore, it was possible to calculate an actual gain score for pupils in the second and third grades. Table 4 shows the average gains made on the reading component of the MAT by pupils in the second and third grades who took both the pretest and posttest. The objective of five months gain was made on both grade levels and in all subtests with the single exception of a 3.4 months gain on the word analysis subtest in the second grade.

TABLE 4

MEAN SUBTEST SCORES ON THE METROPOLITAN ACHIEVEMENT TESTS OF PUPILS TAKING BOTH PRETEST AND POSTTEST

SECOND AND THIRD GRADES

Subtest	Grade 2				Grade 3			
	N	Pretest	Posttest	Gain	N	Pretest	Posttest	Gain
Word Knowledge	16	1.49	2.11	.62	25	2.36	3.20	.84
Word Analysis	16	1.44	1.78	.34	25	2.35	3.06	.71
Reading	16	1.54	2.05	.51	24	2.57	3.15	.58
Total Reading	16	1.56	2.14	.58	24	2.41	3.12	.71

In the area of mathematics, the average gain for grades five, six, and seven on the mathematics component of the MAT was calculated. Here again the MAT was given in October, 1971 and April, 1972. Only the scores of those pupils who took both pre- and posttests were used in the calculation. Table 5 shows the average gain made by these grade levels in mathematics. As can be seen from Table 5, the objective of five months gain was achieved in arithmetic computation in grades five and seven and in arithmetic concepts and problem solving in grade seven only. The sixth grade fell slightly short of the objective on both mathematics subtests.

D. Self-Concept and Attitude Toward School

The objective concerning improvement of pupils' self-concepts and their attitude toward school for the 1971-72 school year was aimed at providing baseline data on the pupils at Goldsmith Elementary School. The Self-Appraisal Inventory (SAI), Primary and Intermediate Level forms, was administered to pupils in kindergarten through the sixth grade in February, 1972, to provide a measure of the pupils' self-concepts. Likewise, the School Sentiment Index (SSI), Primary and Intermediate Level forms, was administered to the same pupils to provide a measure of the pupils' attitudes toward school. The results of these two instruments are shown in Tables 6 and 7. Scores of the tests are recorded as percentages of the total possible positive responses to the test questions, and in addition, are broken down into the different subscales of each instrument as well as recording an overall, or total, score.

TABLE 5

MEAN SUBTEST SCORES ON THE METROPOLITAN ACHIEVEMENT TESTS OF PUPILS TAKING BOTH PRETEST AND POSTTEST

FIFTH, SIXTH, AND SEVENTH GRADES

Subtest	Grade 5				Grade 6				Grade 7			
	N	Pretest	Posttest	Gain	N	Pretest	Posttest	Gain	N	Pretest	Posttest	Gain
Arithmetic Computation	21	4.69	5.34	.65	21	5.10	5.50	.40	24	5.90	6.48	.58
Arithmetic Concepts and Problem Solving	20	4.48	4.64	.16	20	4.70	5.16	.46	23	5.80	6.34	.54

TABLE 6

A COMPARISON OF THE PERCENTAGES OF FAVORABLE RESPONSES ON THE SELF-APPRAISAL INVENTORY AND SCHOOL SENTIMENT INDEX

PRIMARY LEVEL

	Self-Appraisal Inventory					School Sentiment Index					
Group	Peer	Family	School	General	Overall	Teacher	School Subjects	School Social Structure and Climate	Peer	General	Overall
Kindergarten N = 24	56.9	59.7	59.0	61.1	59.0	51.2	87.5	57.5	72.5	73.6	68.8
First Grade N = 21	64.8	69.0	79.0	76.7	72.4	69.4	85.0	66.7	77.1	80.2	76.0
Second Grade N = 24	62.8	59.7	65.3	77.3	66.4	66.7	76.8	58.3	71.7	68.1	68.8
Third Grade N = 18	62.8	42.6	59.7	76.5	61.9	40.5	56.3	28.9	57.8	41.7	45.4
Primary Level N = 87	60.5	58.4	67.1	72.5	64.9	57.6	77.5	54.0	70.3	67.1	65.7

TABLE 7

A COMPARISON OF THE PERCENTAGES OF FAVORABLE RESPONSES ON THE SELF-APPRAISAL INVENTORY AND SCHOOL SENTIMENT INDEX

INTERMEDIATE LEVEL

	Self-Appraisal Inventory					School Sentiment Index					
Group	Peer	Family	School	General	Overall	Peer	Teacher	General	School	Learning	Overall
Fourth Grade N = 22	50.9	66.1	59.5	64.1	60.2	55.9	59.4	63.6	54.5	65.2	58.8
Fifth Grade N = 29	60.9	69.0	64.3	67.6	65.4	73.8	71.3	73.2	60.3	74.1	69.7
Sixth Grade N = 23	54.6	59.1	56.1	62.4	58.0	63.5	62.8	65.7	53.0	61.6	61.0
Intermediate Level N = 74	55.9	65.1	60.3	64.9	61.6	65.3	65.1	68.0	56.3	67.6	63.8

It can be seen from Tables 6 and 7 that the primary grades exhibited a higher overall self-concept and a more positive attitude toward school than did the intermediate grades. The lowest scores on self-concept appeared in the kindergarten for the primary level and in the sixth grade for the intermediate level; while the pupils exhibiting the least positive attitude toward school appeared in the third and fourth grades. In general, the subscales receiving the least favorable responses were the peer subscale in the SAI and the subscale relating to school social climate and structure in the SSI. Therefore, enhancement in these areas would be most helpful in improving the self-concepts of the pupils and their attitudes toward school.

It is planned that these instruments will be administered again during FY73 so that comparisons can be made, and possibly trends or problem areas identified.

E. Parental Involvement

Objectives relating to parental involvement were not as rigorously monitored as were the preceding objectives. Rather, evaluation of these objectives resulted from informal records kept by the principal, lead teacher, and others. Thus, it is not possible to present strict data relating to parental participation objectives.

1. According to conversations with the lead teacher and records kept by her, the objective that 80 per cent of the parents of kindergarten and first grade pupils would have a conference with the teacher was obtained. All of the contacts were not personal; some were conducted via telephone. Opportunities for conferences with parents were provided at periodic parental meetings, PTA meetings, and as requested by the teachers or parents.

2. Records kept by the lead teacher indicated that an average of more than 40 persons attended each of the regular PTA meetings held at Goldsmith. The number of persons attending the meetings varied, of course, with the number sometimes being less than 40 and sometimes more than this number. Also, all persons who attended the meetings were not parents; some were grandparents or older brothers or sisters who attended either in place of or in addition to the parents.

School-Wide P formance, 1971-72

Since reading received a large emphasis at Goldsmith School through CIP and Title I, as well as in the regular instructional program, this area will be the point of concentration as an indicator of overall school performance during the 1971-72 school year. Pupils at Goldsmith received valuable instruction in many other areas including mathematics, language arts, social studies, science, and spelling to mention a few. Data are available on pupil achievement in these other areas; however, a detailed study of each area would be quite voluminous. Therefore, for the purpose of this report, one area has been chosen as representative of school performance.

The performance of Goldsmith pupils on the reading subtest at each grade level is shown in Table 8. Also in Table 8 a comparison is made of the reading achievement of pupils in Goldsmith School with pupils in all Title I schools throughout the entire Atlanta School System. With the exception of the fourth grade, where there were no pretest scores available, only scores of pupils taking both pre- and posttests were considered. Table 9 gives the results of gain score *t* tests, which indicate whether or not the gains made were significant.

TABLE 8

COMPARISON OF READING ACHIEVEMENT
IN GOLDSMITH SCHOOL WITH
ALL TITLE I SCHOOLS

	Goldsmith				Title I Schools			
Grade	N	Pretest	Posttest	Gain	N	Pretest	Posttest	Gain
2	16	1.54	2.05	.51	1927	1.52	1.96	.44
3	24	2.57	3.15	.58	2236	1.98	2.45	.47
4	22	--	3.53	--	2336	--	3.26	--
5	22	3.76	4.11	.35	2203	3.63	4.23	.60
6	24	4.36	4.45	.09	2085	4.04	4.23	.19
7	22	4.36	5.30	.94	2254	4.30	4.73	.43

TABLE 9

READING GAIN SCORE t TESTS
FOR GOLDSMITH AND
ALL TITLE I SCHOOLS

	Goldsmith		Title I Schools	
Grade	df	t-statistic	df	t-statistic
2	15	3.22**	1926	31.86**
3	23	2.71*	2235	26.74**
4	--	--	--	--
5	21	2.18*	2202	20.69**
6	23	0.39	2084	8.54**
7	21	3.23**	2253	17.51**

* Significant at the .05 level.
** Significant at the .01 level.

From Table 9, it can be seen that significant reading gains were made by Goldsmith pupils in grades two, three, five, and seven. Significant gains were achieved at all grade levels by the combined Title I schools. The average gain in reading by pupils at Goldsmith exceeded the average gain of the pupils in all Title I schools in grades two, three, and seven. While pupils showed significant gains between pretest and posttest in most

instances, the pupils still remained below grade level at all grades. By the time pupils reached sixth grade, they had fallen a full two years below grade level. The average ending level of pupils at Goldsmith was higher than all Title I pupils in all grades except the fifth. In general, the gains and final achievement levels of pupils at Goldsmith were slightly higher than for all Title I pupils.

To determine the effect of mobility on reading achievement, a statistical test was made which compared the achievement level of pupils who remained at Goldsmith the entire school year with those pupils who moved either in or out during the year. Scores for pupils who took only the pretest were compared to pretest scores of pupils who took both pre- and posttests. Likewise scores of pupils who took only the posttest were compared to posttest scores of pupils who took both tests. It was assumed that pupils who took only one of the tests were not enrolled in the school at the time of the other test. The results of this comparison are shown in Table 10. The tests showed no statistically significant differences between the reading scores of the mobile and stable populations.

TABLE 10

COMPARISON OF METROPOLITAN ACHIEVEMENT TESTS READING SCORES OF PUPILS TAKING PRETEST OR POSTTEST ONLY WITH READING SCORES OF PUPILS TAKING BOTH PRETEST AND POSTTEST

	Pretest Only			Pretest/Posttest				Posttest Only			Pretest/Posttest			
Grade	N	Mean	S.D.	N	Mean	S.D.	t score	N	Mean	S.D.	N	Mean	S.D.	t score
2	12	1.54	0.4	16	1.54	0.4	0.028	4	2.27	0.8	16	2.05	0.8	0.492
3	13	2.83	1.9	24	2.57	1.0	0.550	3	2.67	0.7	24	3.15	0.8	-1.035
4	-	-	-	-	-	-	-	22	3.53	1.1	-	-	-	-
5	8	3.51	0.6	22	3.75	0.7	-0.844	6	3.72	0.7	22	4.10	0.8	-1.107
6	5	4.30	1.5	24	4.36	1.0	-0.114	2	4.00	1.3	24	4.45	1.1	-0.527
7	2	4.50	1.4	22	4.36	1.0	0.174	3	4.07	0.6	22	5.30	1.7	-1.222

*Significant at the .05 level.
**Significant at the .01 level.

In addition to the study of mobility in relation to pupil performance, the effect of attendance on pupil performance also was tested. The percentage of attendance of pupils who took both pre- and posttests was correlated with the pupils' gain scores in order to determine if there was any significant correlation. The correlation for each grade on the reading subtest is shown in Table 11. Significant correlation was found only in the seventh grade.

TABLE 11

CORRELATION BETWEEN METROPOLITAN ACHIEVEMENT TESTS PRETEST/POSTTEST READING GAIN SCORES AND ATTENDANCE

Grade	df	Coefficient of Correlation
2	14	0.1951
3	22	-0.0383
4	-	-
5	20	0.1495
6	22	-0.2168
7	20	0.4978*

*Significant at the .05 level.
**Significant at the .01 level.

Longitudinal Observation of Test Performance: 1970-71 and 1971-72

This year it was possible to make a close study of school performance over the last two years. Thus, the possibility of trends can be established. A summary of performance on the reading subtest of the MAT for 1970-72 is presented in Table 12. From this table comparison can be made of performance on each grade level for each of the two years. Also progress can be followed as pupils advance from one grade level to the next. Finally, the performance of those pupils who have remained at this school for both years is presented.

TABLE 12

LONGITUDINAL COMPARISON OF MEAN READING PRETEST/POSTTEST SCORES AND GAINS ON THE METROPOLITAN ACHIEVEMENT TESTS

(1970-71 and 1971-72)

	Pupils Tested in 1970-71 (Matched Scores)				Pupils Tested in 1971-72 (Matched Scores)				Pupils Enrolled in 1970-71 and 1971-72 (Matched Scores)			
Grade	N	Pre	Post	Gain	N	Pre	Post	Gain	N	Fall 1971	Spring 1972	Gain
2	24	1.6	2.1	0.5	16	1.5	2.0	0.5	-	-	-	-
3	15	1.8	2.4	0.6	24	2.6	3.2	0.6	13	2.6	3.4	0.8
4	24	3.1	3.4	0.3	22	-	3.5	-	11	-	3.7	-
5	26	4.1	4.2	0.1	22	3.8	4.1	0.3	16	3.7	3.9	0.2
6	27	4.5	4.6	0.1	24	4.4	4.5	0.1	16	4.6	4.6	0.0
7	27	4.4	5.7	1.3	22	4.4	5.3	0.9	13	4.5	5.5	1.0

In general, performance remained about the same at each grade level for the 1970-71 and 1971-72 school years. Highest gains were obtained in grades two, three, and seven during both years. The seventh grade exhibited exceptional gains for both years. The pupils showed approximately the same amount of gain as they advanced to the next grade level from 1970-71 to 1971-72, with the exception of the sixth grade of 1970-71, who showed remarkable improvement as the seventh grade of 1971-72. For the pupils who had remained at Goldsmith for two years, the 1971-72 achievement levels and gains differed only slightly from those of the entire 1971-72 pupil population at each grade level. Further, attention is called to the fact that the 16 pupils who were in the fifth and sixth grades during this two-year period did not make any gain.

Beginning in FY71, the profile of performance in reading for each elementary school was studied. In FY72 a mathematics profile also was produced. For the purpose of this analysis, a predicted achievement level for each grade level within a school was derived. To calculate the predicted achievement level, a regression equation was used, which took into account the effects of prior performance, socio-economic status, attendance, mobility, pupil-teacher ratio, and percentage of pupils passing on achievement. A ratio of actual gain to predicted gain yielded a percentage described as a gain rate of effectiveness. Another ratio of the actual posttest level divided by the national norm for the respective grade level produced an index of acceptability. Table 13 summarizes the profile of Goldsmith School in reading over two years, and Table 14 gives the mathematics profile for 1971-72.

TABLE 13

EFFECTIVENESS AND ACCEPTABILITY OF PUPIL PERFORMANCE
IN READING FOR 1970-71 and 1971-72

Grade	Actual Gain		Predicted Gain		Gain Rate of Effectiveness		Posttest Level		Index of Acceptability	
	1971-72	1970-71	1971-72	1970-71	1971-72	1970-71	1971-72	1970-71	1971-72	1970-71
2	0.5	0.4	0.5	0.4	100	80	1.9	2.0	70	74
3	0.8	0.5	0.4	0.5	200	83	3.3	2.4	89	65
4	1.0	0.2	0.8	0.5	125	33	3.3	3.3	70	70
5	0.3	0.0	0.4	0.5	75	0	3.9	3.9	68	68
6	0.5	0.2	0.4	0.4	125	67	4.4	4.3	66	64
7	0.5	1.3	0.5	0.4	100	260	4.8	5.4	62	70
Average	-	-	-	-	121	87	-	-	71	69

TABLE 14

EFFECTIVENESS AND ACCEPTABILITY OF PUPIL PERFORMANCE
IN MATHEMATICS FOR 1971-72

Grade	Actual Gain	Predicted Gain	Gain Rate of Effectiveness	Posttest Level	Index of Acceptability
2	0.8	0.7	114	2.2	81
3	0.6	0.6	100	3.3	89
4	0.8	0.9	89	4.0	85
5	0.6	0.3	200	5.2	91
6	0.0	0.3	0	5.2	78
7	0.7	0.3	233	6.5	84
Average	-	-	123	-	85

In reading, each grade at Goldsmith performed effectively with the exception of the fifth grade, which was not exceptionally low with an effectiveness score of 75. Also, an improvement of more than 50 points in the gain rate of effectiveness over the 1970-71 figure occurred at each grade level except the seventh, which still performed effectively despite a large decrease from 1970-71. Overall, the school performed effectively in reading and raised its effectiveness considerably over the 1970-71 figure.

The average index of acceptability increased slightly over the 1970-71 figure; however, the pupils are still performing well below national norms. Increases in the index of acceptability occurred in grades three and six, decreases occurred in grades two and seven, and grades four and five remained at the same level.

In mathematics each grade level performed effectively except the fourth and sixth grades. The fourth grade score, however, was very close to being effective. On the average, the school performed effectively in mathematics.

The index of acceptability for Goldsmith was higher in mathematics than in reading. The pupils were not yet performing at national norms in mathematics, but the average score of 85 indicates that they were near this goal.

X. COST ANALYSIS

A cost analysis was done in an attempt to relate gains in reading achievement to the amount expended in both general and compensatory funds. The total expenditures and ADA for Goldsmith are presented in Table 15 to give an overall cost of school operation. Expenditures were obtained

from the General Funds Financial Report and the Trust and Agency Report for June 30, 1972. These expenditures do not include the cost for food services, replacement or repair of equipment, and capital outlay.

Table 15

TOTAL EXPENDITURES AND ADA FOR GOLDSMITH SCHOOL

A.	General Funds		
	1. Regular		
	a. Salary	$191,454.11	
	b. Non-Salary	15,203.73	
	2. CIP		
	Non-Salary	396.60	
	3. TOTAL GENERAL FUNDS	$207,054.44	
B.	Special Projects		
	1. Title I		
	a. Salary (1 lead teacher, 1 social worker, & 2 aides)	$ 33,848.68	
	b. Non-Salary	586.19	
	2. TOTAL SPECIAL PROJECTS	$ 34,434.87	
C.	TOTAL FUNDS EXPENDED	$241,489.31	
D.	TOTAL ADA		221

In Table 16 the expenditures are broken down into per pupil cost by grade level. General funds were distributed equally throughout the school. Title I funds also were distributed equally throughout the school except for the salary of one aide who worked exclusively with the kindergarten. The remaining Title I personnel, lead teacher, social worker, and aide worked at all grade levels in the school.

A projection of the amount of funds necessary to achieve acceptable gains, i.e., one month of gain for each month of instruction, was made by dividing the yearly per pupil expenditures by the rate of reading gain. Thus, the projected cost of obtaining one grade unit of gain is obtained. The figures presented here are not refined and only serve to give a picture of the relative costs of achievement at each grade level.

Expenditures were the same for each grade level two through seven. However, because of the large differences in the rate of reading gain among the grade levels, the projected cost for one grade unit of gain also varied greatly. A rate of gain of 13 per cent for the sixth grade caused the cost projection to be much higher than the other grade levels. The lowest projected cost appeared in the seventh grade, which also exhibited the greatest rate of gain. There was not much variance in the projected cost at the lower grade levels.

An additional analysis of reading cost related per pupil expenditure of compensatory funds to the gain rate of effectiveness for reading. The per pupil expenditure of compensatory funds was divided by the gain rate of effectiveness yielding the cost per unit of effectiveness. The expenditures per unit of effectiveness did not vary much among the grade levels, ranging from a low of $0.73 in the third grade to a high of $1.96 in the fifth grade.

TABLE 16

COST ANALYSIS OF READING GAINS BY GRADES TOTAL
SCHOOL AVERAGE DAILY ATTENDANCE (ADA)
GRADES K - 7
N = 221

	Grades					
	Second	Third	Fourth	Fifth	Sixth	Seventh
ADA for Grade	25	34	24	29	27	27
Per Cent of Total ADA	11	15	11	13	12	12
Per Pupil Cost						
A. General Funds						
1. Regular						
a. Salary	$ 866.31	$ 866.31	$ 866.31	$ 866.31	$ 866.31	$ 866.31
b. Non-Salary	68.80	68.80	68.80	68.80	68.80	68.80
2. CIP						
Non-Salary	1.79	1.79	1.79	1.79	1.79	1.79
3. TOTAL	$ 936.90	$ 936.90	$ 936.90	$ 936.90	$ 936.90	$ 936.90
B. Special Projects						
1. Title I						
a. Salary	$ 144.11	$ 144.11	$ 144.11	$ 144.11	$ 144.11	$ 144.11
b. Non-Salary	2.65	2.65	2.65	2.65	2.65	2.65
2. TOTAL	$ 146.76	$ 146.76	$ 146.76	$ 146.76	$ 146.76	$ 146.76
Rate of Reading Gain for Pre/Post Population (Per Cent)	83	95	-	57	13	151

TABLE 16 (Cont'd)

Projected Cost for One Grade Unit Gain	Grades					
	Second	Third	Fourth	Fifth	Sixth	Seventh
A. General Funds	$1,128.80	$ 986.21	$ -	$1,643.68	$7,206.92	$ 620.46
B. Special Funds	176.82	154.48	-	257.47	1,128.92	97.21
C. TOTAL	$1,305.62	$1,140.69	$ -	$1,901.15	$8,335.84	$ 717.67
Gain Rate of Effectiveness	100	200	125	75	125	100
Expenditure (Per Pupil) of Compensatory Funds for Each Unit of Effectiveness	$ 1.47	$ 0.73	$ 1.17	$ 1.96	$ 1.17	$ 1.47

XI. CONCLUSIONS

From the information analyzed in this report and gathered through contact with the school staff during the year, the following conclusions are drawn:

A. The absenteeism rate of a certain portion of the pupil population who are chronically absent was not drastically improved with resources presently available to the Goldsmith School. It is believed that in order to improve the attendance habits of these pupils the attitudes of the parents must be changed.

B. Pupils in the primary grades have slightly higher self-concepts and more positive attitudes toward school than do the upper elementary level pupils.

C. Generally, the pupils entering first grade at Goldsmith were well prepared and made appropriate gains in achievement during the first year.

D. The specified objective for the second and third grades of five months gain in reading between pre- and posttests was achieved in both grades.

E. The specified objective for the fifth, sixth, and seventh grades of five months gain in mathematics was achieved in the seventh grade on both math subtests and on arithmetic computation in the fifth grade.

F. In general, pupils at Goldsmith made better gains in reading than did pupils from other Title I schools.

G. Pupils at Goldsmith made statistically significant gains in reading at each grade level except the sixth.

H. Mobility of pupils at Goldsmith made no statistically significant difference in reading achievement.

I. A statistically significant correlation between attendance and reading achievement occurred only at the seventh grade level.

J. As measured by the gain rate of effectiveness, Goldsmith School performed effectively in both reading and mathematics and improved its reading effectiveness considerably from FY71.

K. While performing effectively, pupils at Goldsmith are still performing below national norms in both reading and mathematics.

L. The specified objectives relating to identification and remediation of health problems were achieved in the areas of hearing and tuberculosis. Objectives were not achieved in the visual and dental health areas. The unwillingness of parents to cooperate with the school in providing transportation for the pupils to health service facilities was cited as the major cause of failure to meet these objectives.

XII. RECOMMENDATIONS

The following recommendations are made based upon the content of this report and with the identified goals of the instructional program in mind:

A. Continued and increased efforts should be made to involve parents and members of the community in the activities and instructional program of the school.

B. Attention should be given to designing specific activities aimed toward improving the pupils' self-concepts, relationship with peers, and attitudes toward school.

C. Special attention should be given to those grade levels where achievement has remained at a low level for the two year period.

D. Efforts should be made to identify the successful practices and techniques that have helped to maintain a high level of achievement in certain grade levels over the past two years.

The principal and faculty at Goldsmith are to be highly commended for their continued efforts to meet the needs of their pupils. The staff believes that definite progress is being made in the effort to upgrade the academic skills of the pupils. This attitude is also shared by the research assistant.

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RESEARCH AND DEVELOPMENT REPORT

Vol. VI, No. 14 December, 1972

JOHN HOPE ELEMENTARY SCHOOL

1971-72

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I. INTRODUCTION

Prior to the fall quarter, 1972, John Hope Elementary School consisted of grade levels K-7. However, when Walden Middle School was opened in March, 1971, the pupils in grades six and seven were transferred to the new middle school, reducing the student body by approximately 127 pupils. As a result, there were approximately 463 pupils who attended grades K-5 at John Hope Elementary School for the total school year.

The majority of the pupils who attended John Hope Elementary School were from low-income families. These economically deprived children, who had limited sensory learning experiences prior to entering school, were not prepared for instruction in a traditional school program. To compensate for the learning deficiencies of these children by meeting their special physical, psychological, and academic needs, the Follow Through Project was operated in grades K-2.

Because approximately 53 per cent of the pupils at John Hope Elementary School were recognized as coming from economically deprived families, the school received compensatory funds from Title I (Public Law 89-10). Additional supporting services were supplied by the Comprehensive Instructional Program (CIP) and the Career Opportunities Program (COP).

Supporting Services

A. Elementary and Secondary Education Act (ESEA) Title I

There were four aides hired at John Hope Elementary School to work with the low achieving pupils in the non-Follow Through grade levels (3-5). There was no Title I lead teacher at John Hope; the activities of the aides were coordinated by the principal.

B. Career Opportunities Program (COP)

This program was a training program through which participants pursued professional certification. Although Career Opportunities Program (COP) paid no salaries for aides, it did pay all college costs (tuition, books, and supplies) for aides to attend accredited colleges or universities. Three Follow Through aides and one Title I aide at John Hope Elementary School participated in the COP.

C. Follow Through Project.

The Follow Through Project was designed for disadvantaged pupils. At John Hope Elementary School all pupils in the kindergarten through grade two had benefit of the Follow Through instructional program.

Follow Through made use of the Interdependent Learning Model (ILM), a games approach to learning. The project utilized a specialized method of teaching phonics skills, and offered special instruction in music, art, speech, and inactive communication. In addition, medical and dental care and psychological guidance was offered to all eligible pupils (pupils from homes in which the income did not exceed $1800 per year for a one child family plus $600 for each additional child).

D. Comprehensive Instructional Program (CIP)

The Comprehensive Instructional Program (CIP) was concerned with curriculum improvement and teacher in-service training. Reading and mathematics instruction in grades 1-3 were stressed during FY 72. Through the CIP, each school was encouraged to develop behaviorally stated objectives directed at improving the reading and mathematics instruction.

II. NEEDS OF THE PUPILS

The Follow Through pupils at John Hope Elementary School were recognized as having the following needs:

A. To learn to read.

B. To develop mathematical ability.

C. To develop positive self-concepts and positive attitudes toward school, teachers, and peers.

D. To become independent learners.

E. To receive parental reinforcement for the Follow Through instructional program.

F. To receive medical and dental care.

G. To have psychological services available when needed.

III. GOALS

The goals of the Follow Through Project were developed on the basis of the identified needs of the pupils. They are as follows:

A. To teach pupils to read.

B. To teach pupils mathematics skills.

C. To enable pupils to develop positive self-concepts and to gain positively in attitude toward school, teachers, and peers.

D. To enable pupils to become independent learners.

E. To promote parental involvement in the Follow Through program.

F. To provide medical and dental care for the pupils and to teach these pupils good health habits.

G. To provide psychological services to pupils.

IV. OBJECTIVES

Behavioral objectives were developed for Follow Through during FY 72. They are as follows:

A. The kindergarten pupils will be introduced to the Direct Approach to Decoding (DAD) program which is designed for teaching phonics skills. Beginning with grade one, the pupils will increase their competence in phonics skills so that they will make the following gains on the Phonics Skills Test (PST): eight levels for grade one, fifteen levels for grade two, and ten levels for grade three.

B. First grade pupils who have been in the Follow Through program for the kindergarten year will score C or higher on the Metropolitan Readiness Tests (MRT). The same percentage of first grade pupils who score C or higher on the MRT will score 1.6 or above on the reading posttest of the Metropolitan Achievement Tests (MAT). The score 1.6 indicates a grade level of first grade, six months. For the second and third grade pupils, there will be a reading gain of one month for each month in school as indicated by the MAT pretest and posttest.

C. The first grade pupils who participated in Follow Through's kindergarten will score C or above on the MRT; those first graders scoring C or above on the MRT will score at least 1.6 in mathematics on the MAT. The second and third graders will gain one month in mathematical ability for each month in school. This objective is stated with the qualification that Follow Through teaches mathematics using a logical approach.

D. The pupils will demonstrate significantly higher (.05 level) self-concepts on the Self Appraisal Inventory (SAI) than the comparison group.

E. The pupils will increase significantly (.05 level) in positive attitudes toward school, teachers, and peers as shown by the pretest and posttest of the Test of Attitudes of Children (TAC).

F. A games approach will be used to enable pupils to become independent learners and their progress will be judged individually by observation, using a checklist.

G. The parents or guardian of each eligible pupil will be visited during the year by the parent workers, who will demonstrate to the parents the Follow Through games and encourage the parents to play the games with the child. Parents will be invited to parent meetings, to visit the classroom, and to participate in parent volunteer groups throughout the year.

H. Because the emphasis of the Follow Through health program is toward prevention and health education, each eligible child in the program will receive complete medical and dental care and daily instruction so that he will demonstrate good personal health habits. This will be evaluated by a survey-checklist. In addition, parents will be invited to attend sessions in which instruction in nutrition will be given.

I. Psychological services will be made available to all eligible pupils as needed. Referrals to psychologists will be made by teachers, social workers, or Follow Through staff when a need is observed so that the reason for referral will be eliminated.

V. CRITICAL VARIABLES

A. Phonics skills.
B. Total reading.
C. Mathematics skills.
D. Self-concept.
E. Attitude:
    1. toward school,
    2. toward teachers, and
    3. toward peers.
F. Parent involvement.
G. Health care.
H. Psychological services.
I. Independence in learning.

VI. MANAGEMENT AND CONTROL

Several changes were made in Follow Through personnel during FY 72. One change was strictly that of title. Since the roles of the lead teachers for school administration and the lead teachers for Follow Through differed, confusion arose in the schools. Therefore, the lead teachers for Follow Through were given the title program assistants. The program assistant worked directly under the principal to coordinate the Follow Through activities at John Hope Elementary School.

A parent of one of the pupils was hired to assist the program assistant. This parent was called a parent assistant and handled all clerical work involving Follow Through. Other local Follow Through staff included an instructional assistant; nine classroom teachers (three at each grade level K-2), and nine educational aides (one to serve each Follow Through class). Four parent workers, who were parents of Follow Through children, worked with Follow Through at John Hope Elementary School. They visited in the home of each Follow Through child, supervised the transportation of Follow Through eligible children to the dentist and physician, and sought parent volunteers to chaperone pupils on the trips for medical and dental purposes as well as educational trips in the city of Atlanta. In addition, parent volunteers

were sought to aid in the classroom and to aid in making Follow Through instructional materials.

The Follow Through central staff, who served John Hope and the other five Follow Through schools, consisted of a director, two instructional coordinators, a coordinator of instructional assessment and development, a coordinator of health services, two social workers, two psychologists, and an arts and communication team of six persons.

The activities of the four Title I aides at John Hope were coordinated by the principal. The aides served in non-Follow Through grade levels and worked, under the direction of the classroom teachers, with pupils in small groups. Three of the aides each served one grade level 3-5; the fourth aide worked in grades 3 and 4.

VII. PROCESS

The Interdependent Learning Model (ILM) was the basic model for teaching all Follow Through classes. The model made use of a game format for reinforcing classroom instruction and strengthening skills. The games, which were made by the Follow Through staff and parent volunteers, were developed as needed.

An important component of the Interdependent Learning Model (ILM) was the method utilized for teaching phonics skills. All classes in grades K-2 at John Hope were taught the Direct Approach to Decoding (DAD). The DAD was used along with basal readers.

A Follow Through aide was assigned to each Follow Through class. The aide worked under the guidance of the classroom teacher and served mainly as a tutor for small groups of pupils.

A Follow Through communication team, consisting of one art teacher, one music teacher, and one speech teacher, served the Follow Through Program at John Hope. The three teachers divided their time equally among three Follow Through schools. Each member of the team spent one and one-half days every week at John Hope. The music and art teachers rotated classes within John

Hope, teaching the pupils and, in the process, demonstrating correct instructional procedures for the classroom teachers.

Music and art were taught to all Follow Through pupils. Entire class groups received music instruction, but for art instruction, the pupils were divided into small groups within the classrooms. Speech instruction involved only kindergarten and first grade pupils.

The four parent workers worked with the Follow Through social worker and directly under the Follow Through program assistant. They visited in the home of each eligible child, explained the Follow Through program, and attempted to enlist the active support of parents.

The Title I aides served the non-Follow Through classes. One aide was assigned to each grade level 3-5; the fourth aide served classes from the third and fourth grades.

VIII. EVALUATION

Diagnosis

The performance of the Follow Through pupils was evaluated on the basis of the Follow Through Phonics Skills Test (PST), the Metropolitan Readiness Tests (MRT), the Metropolitan Achievement Tests (MAT), the Self Appraisal Inventory (SAI), and the Test of Attitudes of Children (TAC). The pupils were grouped for analysis on the basis of Follow Through experience to determine if the number of years in the Follow Through program influenced performance.

Attendance data were analyzed for the entire pupil population at John Hope and the cost effectiveness of the instruction at each level was determined. In addition, a study was conducted by the Department of Research and Development to determine the effectiveness and acceptability of the reading and mathematics programs of John Hope Elementary School. (The MAT scores of pupils from grade levels 2-5 were used in both studies.)

Evaluation of the Performance of Follow Through Pupils

A. Phonics Skills

Objective A. The kindergarten pupils will be introduced to the Direct Approach to Decoding (DAD) program which is designed for teaching phonics skills. Beginning with grade one, the pupils will increase their competence in phonics skills so that they will make the following gains on the Phonics Skills Test (PST): eight levels for grade one, fifteen levels for grade two, and ten levels for grade three.

The kindergarten pupils at John Hope were introduced to phonics skills through the Direct Approach to Decoding (DAD) Program. Consequently, they were administered the Phonics Skills Tests (PST) as posttest only. The mean scores are listed in Table 1 below.

TABLE 1

PHONICS SKILLS TEST
KINDERGARTEN
N = 44

Mean Raw Scores	Level
2.39	5
1.23	3
1.86	6
0.59	5
Total 6.07	

There were 23 levels in Chapter I of the DAD Program. The kindergarten mean scores on the subtests of the Phonics Skills Tests (PST) ranged from scores corresponding to levels 3 to 6 of the DAD. This indicated that pupils in kindergarten had only introductory knowledge of phonics skills at the end of the year.

The first grade pupils at John Hope Elementary School were administered the Phonics Skills Test as pretest and posttest. The objective of an

eight level gain was achieved by the six pupils who entered Follow Through in the first grade in Letter Sounds and Auditory Blending. The objective was achieved in all categories by the pupils who had participated in Follow Through during kindergarten and the first grade.

While the first grade pupils who had participated in Follow Through for two years achieved the objective and scored higher than the pupils who entered Follow Through in the first grade, they did not score significantly higher on the posttest. Both groups were performing at levels corresponding to chapter I of the DAD Program in all categories except Auditory Blending. On that subtest, the group with two years of Follow Through experience was performing at the first level of Chapter II. (There is one chapter dealing with letter sounds and the remaining categories consist of five chapters each.)

The phonics skills objective for the second grade was a gain of 15 levels between the pretest and posttest of the Phonics Skills Test (PST). The three groups of second grade pupils accomplished the following:

1. The three second grade pupils who entered Follow Through in the second grade achieved the objective in Decoding, Auditory Blending, and Oral Reading.
2. The second grade pupils who were in Follow Through during the first and second grades did not achieve the objective.
3. The second grade pupils who participated in Follow Through from kindergarten through the second grade achieved the gain in Oral Reading.

While the pupils who participated in Follow Through from kindergarten through the second grade performed at the highest mean level of the three groups (at level 17 of 23 levels in Letter Sounds, at levels corresponding to Chapter II in Decoding and Auditory Blending, and at a level corresponding to Chapter III in Oral Reading), there was no significant difference in the posttest scores of the three groups. (See Table 3 on page 11.)

TABLE 2

PHONICS SKILLS TEST
COMPARISON OF THE GAINS OF FIRST GRADE PUPILS IN FOLLOW THROUGH FOR 1 AND 2 YEARS
N = 42

PHONICS SKILLS SUBTESTS	PUPILS IN FOLLOW THROUGH FOR 1 YEAR						PUPILS IN FOLLOW THROUGH FOR 2 YEARS					
	No. of Pupils	Pre		Post		Gain	No. of Pupils	Pre		Post		Gain
		Mean Raw Score	Level	Mean Raw Score	Level	Level		Mean Raw Score	Level	Mean Raw Score	Level	Level
	6						36					
Letter Sounds		3.33	7	6.33	15	8		3.06	7	7.33	17	10
Decoding		0.50	3	2.83	1	-4		1.03	3	4.97	12	9
Auditory Blending		0.83	4	8.33	21	17		2.39	6	[illegible]47	1(II)[a]	18
Oral Reading		0.00	0	2.33	1	1		0.11	0	5.08	14	14

[a]The Roman numeral in parentheses refers to the chapter. If not indicated, the level is of Chapter I of the DAD.

TABLE 3

PHONICS SKILLS TEST
COMPARISON OF GAINS OF SECOND GRADE PUPILS IN FOLLOW THROUGH FOR 1, 2, AND 3 YEARS
N = 62

PHONICS SKILLS SUBTESTS	PUPILS IN FOLLOW THROUGH FOR 1 YEAR					PUPILS IN FOLLOW THROUGH FOR 2 YEARS					PUPILS IN FOLLOW THROUGH FOR 3 YEARS				
	No. of Pupils	Pre		Post		Gain	No. of Pupils	Pre		Post		Gain	No. of Pupils	Pre		Post		Gain
		Mean Raw Score	Level	Mean Raw Score	Level	Level		Mean Raw Score	Level	Mean Raw Score	Level	Level		Mean Raw Score	Level	Mean Raw Score	Level	Level
	3						24						35					
Letter Sounds		4.33	10	8.33	19	9		4.63	12	5.63	15	3		5.63	15	7.06	17	2
Decoding		1.33	5	10.67	1(II)[a]	19		2.58	7	5.17	12	5		5.17	12	11.37	1(II)[a]	12
Auditory Blending		0.33	0	5.67	15	15		3.04	8	6.97	18	3		6.97	18	10.77	1(II)[a]	6
Oral Reading		0.00	0	13.00	5(II)[a]	28		1.83	7	6.71	18	11		6.71	18	16.77	1(III)[a]	15

[a]The Roman numeral in parenthesis refers to the chapter number. If not indicated, the level is in Chapter 1 of the DAD.

B. Metropolitan Readiness Tests (MRT)

Objective B. First grade pupils who have been in the Follow Through program for the kindergarten year will score C or higher on the Metropolitan Readiness Tests (MRT)...

The first grade pupils at John Hope were administered the Metropolitan Readiness Tests (MRT) as pretest. Possible grades on the MRT are A, B, C, D, and E. The number and percentage of the first grade pupils at John Hope achieving each grade are listed in Table 4 below.

TABLE 4

FIRST GRADE METROPOLITAN READINESS TESTS (MRT) SCORES
N = 82

Grade	Number	Per Cent
A	6	7.3
B	7	8.5
C	38	46.3
D	25	30.5
E	6	7.3

From the information in the table above, it can be found that 62.1 per cent of the first grade pupils at John Hope scored C or above on the MRT.

C. Metropolitan Achievement Tests (MAT)

Objective B.... The same percentage of first grade pupils who score C or higher on the MRT will score 1.6 or above on the reading posttest of the Metropolitan Achievement Tests (MAT). The score 1.6 indicates a grade level of first grade, six months. For the second and third grade pupils, there will be a reading gain of one month for each month in school as indicated by the MAT pretest and posttest.

Objective C. The first grade pupils who participated in Follow Through's kindergarten will score C or above on the MRT; those first graders scoring C or above on the MRT will score at least 1.6 in mathematics on the MAT. The second and third graders will gain one month in mathematical ability for each month in school. This objective is stated with the qualification that Follow Through teaches mathematics using a logical approach.

Although 82 first graders took the MRT, only 55 of the first grade pupils took all sections of the MAT. The pupils were divided for analysis on the basis of Follow Through experience, and the results are reported in Table 5 on page 14. When comparing the scores of the two groups, approximately the same percentage of pupils in each of the groups scored 1.6 or above on Total Mathematics; however, a larger percentage of the Follow Through first grade pupils who had attended Follow Through kindergarten scored 1.6 or above on Total Reading of the MAT.

The scores of the second grade pupils who took both MAT pretest and posttest were divided for analysis on the basis of the number of years the pupils had participated in Follow Through. The scores are listed in Table 6 on page 15.

An objective for the second grade pupils was a gain of one month for each month in the Follow Through Program. Since there were six months between the MAT pretest and posttest, a gain of 0.6 (grade equivalent score) satisfied the objective. The objective was not achieved by the second grade pupils who entered Follow Through in the second grade or by the pupils who participated in Follow Through during the first and second grades. However, the second grade pupils who had participated in Follow Through from kindergarten through the second grade achieved the objective on the MAT subtest Reading. In addition, they gained over five months between the pretest and posttest on Word Analysis, Total Math, and Total Reading.

The MAT posttest scores of the three second grade groups were compared. There was no significant difference in the scores of the second grade pupils who had entered Follow Through in the second grade

and the second grade pupils who had participated in Follow Through during the first and second grades. However, the second graders who had participated in Follow Through from kindergarten through the second grade (approximately one-half the total second grade) scored significantly higher than the other two groups on all subtests of the MAT.

TABLE 5

NUMBER AND PERCENTAGE OF PUPILS SCORING AT LEAST FIRST GRADE, SIX MONTHS ON THE METROPOLITAN ACHIEVEMENT TESTS
FIRST GRADE
N = 55

Years in Follow Through	Number	Pupils Scoring at Least 1.6 on Total Reading		Pupils Scoring at Least 1.6 on Total Math	
		N	%	N	%
2	40	22	55.0	14	35.0
1	15	7	46.7	5	33.0
Total	55	29	52.7	19	34.5

D. Self-Concept

Objective D. The pupils will demonstrate significantly (.05 level) self-concepts on the Self Appraisal Inventory (SAI) than the comparison group.

A small sample of Follow Through pupils (75 Follow Through pupils from the 6 Follow Through schools) were administered the Self Appraisal Inventory (SAI). The scores were analyzed by grade level. However, there were too few pupils from John Hope Elementary School taking the inventory to analyze the scores separately from the total Follow Through group.

TABLE 6

COMPARISON OF METROPOLITAN ACHIEVEMENT TESTS (MAT) SCORES OF SECOND GRADE PUPILS IN FOLLOW THROUGH FOR 1, 2, AND 3 YEARS
1971-72

		First Year in Follow Through			Second Year in Follow Through			Third Year in Follow Through		
		Pre	Post	Gain	Pre	Post	Gain	Pre	Post	Gain
Word Knowledge	Mean (Grade Equivalent)	1.29	1.71	0.44	1.40	1.75	0.37	1.59	2.06*	0.47
	S.D.	0.19	0.36	-	0.20	0.39	-	0.44	0.74	-
	No. of Pupils	7	8	7	26	27	28	38	36	35
Word Analysis	Mean (G.E.)	1.29	1.61	0.36	1.25	1.61	0.38	1.51	2.08*	0.59
	S.D.	0.16	0.35	-	0.22	0.42	-	0.51	1.01	-
	No. of Pupils	7	8	7	26	27	26	38	36	35
Reading	Mean (G.E.)	1.34	1.75	0.47	1.42	1.70	0.30	1.60	2.24*	0.67
	S.D.	0.19	0.41	-	0.22	0.78	-	0.40	1.39	
	No. of Pupils	7	8	7	25	27	25	37	36	34
Total Math	Mean (G.E.)	1.39	1.80	0.53	1.46	1.77	0.37	1.54	2.04*	0.51
	S.D.	0.35	0.79	-	0.38	0.49	-	0.45	0.83	-
	No. of Pupils	7	8	7	24	27	24	38	36	34
Total Reading	Mean (G.E.)	1.34	1.78	0.49	1.43	1.76	0.35	1.63	2.27*	0.56
	S.D.	0.16	0.26	-	0.20	0.48	-	0.42	1.23	-
	No. of Pupils	7	8	7	25	27	25	37	36	34

*Significantly different from the posttest scores of the other two groups ($p < .05$).

Objective E. The pupils will increase significantly (.05 level) in positive attitudes toward school, teachers, and peers as shown by the pretest and posttest of the Test of Attitudes of Children (TAC).

The Test of Attitudes of Children (TAC) was administered to all Follow Through pupils by the Follow Through coordinator of assessment and development. After factor analysis of the test items, many were deleted for the posttest. Although requested, the scores of neither the pretest or the posttest were made available by the Educational Evaluative Services (EES) for the external evaluation of Follow Through conducted by the Department of Research and Development.

E. Parent Involvement

Objective G. The parents or guardian of each eligible pupil will be visited during the year by the parent workers, who will demonstrate to the parents the Follow Through games and encourage the parents to play the games with the child. Parents will be invited to parent meetings, to visit the classroom, and to participate in parent volunteer groups throughout the year.

The parents of each eligible Follow Through child were visited during the school year. Parents were invited to Follow Through meetings, to visit the classroom, and to participate in parent volunteer groups. While a few parents volunteered for service in the classroom and for aiding the Follow Through staff in making Follow Through games, the majority of parent response was in serving as chaperones for pupils on trips to the dentist and physician or as chaperones on field trips in the city of Atlanta.

F. Health Care

Objective H. Because the emphasis of the Follow Through health program is toward prevention and health education, each eligible child in the program will receive complete medical and dental care and daily instruction so that he will demonstrate good personal health habits. This will be evaluated by a survey-checklist. In addition, parents will be invited to attend sessions in which instruction in nutrition will be given.

Each Follow Through eligible child was given dental and health check-ups during the school year. When necessary, dental work was performed. When illnesses occurred, pupils were taken to a pediatrician. The final health services report for Follow Through, which was included in the internal Follow Through final report, gave the data for John Hope. See Table 7 below.

G. Psychological Service

Objective I. Psychological services will be made available to all eligible pupils as needed. Referrals to psychologists will be made by teachers, social workers, or Follow Through staff when a need is observed so that the reason for referral will be eliminated.

Psychological service was provided for Follow Through eligible children by two Follow Through psychologists. Referrals were made by classroom teachers, the social workers, or other Follow Through staff when the need was recognized.

TABLE 7

FOLLOW THROUGH HEALTH SERVICES FOR JOHN HOPE ELEMENTARY SCHOOL

Health Procedures	Pupils Assessed	Number of Pupils
Dental Care	Kindergarten	79
	New Follow Through Pupils (Grades 1-2)	54
Physical Examination	Kindergarten and new Follow Through pupils	77
Height and Weight	All Follow Through pupils	256
Hematocrits	Kindergarten and new Follow Through pupils and Follow Through pupils with history of anemia	150
Immunization	As need indicated	127
Urinalysis	Kindergarten and new Follow Through pupils	105
Vision Screening	All Follow Through pupils	106
Hearing Screening	All Follow Through pupils	144

H. Independent Learning

A Follow Through objective was to enable pupils to become independent learners. A checklist was to be developed during the year to measure progress. However, the checklist is still in the developmental stage. Problems arose in attempting to isolate the behavioral characteristics of an independent learner.

Effectiveness - Acceptability Study

John Hope Elementary School had both effective reading and effective mathematics programs during the 1971-72 school year, based on the Effectiveness-Acceptability Study conducted by the Division of Research and Development. The study, which utilized median Metropolitan Achievement Tests (MAT) pretest, posttest, and gain scores of all pupils taking the MAT pretest and/or posttest was conducted within all the Atlanta Public Schools in order to compare the progress of pupils by school and by grade level, taking into account six factors which were believed to influence achievement. The factors were as follows:

A. Pretest scores.

B. Stability Index.

C. Per cent of paid lunches.

D. Pupil-teacher ratio.

E. Per cent of pupil attendance.

F. Per cent of pupils passing.

During the six months period between the MAT pretest and posttest, the pupils at John Hope were predicted to gain in reading ability, taking into account the six factors, from a low two months during the six months period in grade three to a high five months during the six months period in grade four.* (See Table 8 on page 20.)

*In the fourth grade, the study was based on posttest scores of 1970-71 since there was no Metropolitan Achievement Tests (MAT) pretest results available for use by the Atlanta Public Schools.

Analysis of the test data revealed that the third, fourth, and fifth grade pupils gained a hundred per cent or more than was predicted on the reading section of the MAT, indicating effective reading programs. The total second grade, which was predicted to show a gain of three months, actually gained two months.

To be designated as acceptable, the median performance of the pupils by grade level had to be at the national norm, which on the MAT was a score corresponding to the grade level of the pupils. The levels of acceptability ranged from 59 to 62 per cent in grades 2 through 5.

The mathematics MAT data revealed the mathematics instruction at John Hope to be effective. (See Table 9 on page 20.) The overall effectiveness was 123 per cent of the prediction; the instruction in the fourth grade was 90 per cent effective; in the second and third grades, 100 per cent effective; and in the fifth grade, 200 per cent effective.

The overall acceptability of the mathematics program at John Hope was 74 per cent. The index of acceptability ranged from 67 per cent in grade two to 79 per cent in grade five.

Mathematics performance was included in the study for the first time during the 1971-72 school year. The Effectiveness-Acceptability Study of 1970-71 was based on reading performance only. When comparing the reading performance of the pupils at John Hope in 1970-71 to the performance in 1971-72, the performance of the second, third, and fourth grades was more effective in 1971-72. Consequently, the result was that the reading program for John Hope, which was found ineffective in 1970-71, was found to be effective in 1971-72.

Career Opportunities Program (COP)

There were four aides at Dean Rusk who participated in the Career Opportunities Program (COP). In conjunction with COP, a random sample of teachers at John Hope were asked to complete the Organizational Climate Index (OCI) which was developed by George Stern of Syracuse University.

The OCI consists of 300 true or false statements concerning the organizational climate of the school. The index is based on thirty need-press scales postulated by Henry A. Murray and his associates of Harvard

TABLE 8

EFFECTIVENESS-ACCEPTABILITY OF READING PROGRAM
1971-72

Grade	Actual MAT Scores		Gain		Gain Rate of Effectiveness		Index of Acceptability	
	Pre	Post	Actual	Predicted	1971-72	1970-71	1971-72	1970-71
2	1.4	1.6	0.2	0.3	67	0	59	59
3	2.0	2.3	0.3	0.2	150	120	62	65
4	2.3	2.9	0.6	0.5	120	40	62	57
5	3.0	3.4	0.4	0.4	100	140	60	65
				Average	109	75	61	62

TABLE 9

EFFECTIVENESS-ACCEPTABILITY OF THE MATHEMATIC PROGRAM
1971-72

Grade	Actual MAT Scores		Gain		Gain Rate of Effectiveness	Index of Acceptability
	Pre	Post	Actual	Predicted		
2	1.4	1.8	0.4	0.4	100	67
3	2.4	2.8	0.4	0.4	100	76
4	2.6	3.5	0.9	1.0	90	74
5	4.3	4.5	0.2	0.1	200	79
				Average	123	74

University in 1938. These scales are derived from six first-order OCI factors. (The list is on page 1 of the Appendix.) Five of the six first order factors describe a second-order factor called "development press," which is the capacity of the organizational environment to support, satisfy, or reward self-actualizing behavior. The sixth first-order factor, impulse control, describes the second-order "control press," the characteristics of the environment which inhibit or restrict personal expressiveness.

The data on the climate at John Hope is included in Table 10 on page 22. The raw scores on the six factors were converted to standard scores. Therefore, the higher the score on each factor (including number 6) the more open the climate.

The mean OCI scores were lower than the norm on Factors 1, 2, 4, and 5, indicating that the teachers perceived the climate in those areas not open. The six factors which are intellectual climate, achievement standards, supportiveness, and orderliness, are defined on page 2 of the Appendix.

In the general OCI study, which included twenty-eight schools, an intercorrelation matrix including the OCI factors, reading achievement scores, and per cent of attendance was computed. No significant correlation was found between the degree of openness of climate and achievement.

Attendance

The overall Average Daily Attendance (ADA) at John Hope was 71 pupils. ADA in grades in two through five ranged from 68 pupils to 75 pupils. (See first item of Table 11 on page 23.)

The per cent of pupil attendance at John Hope ranged from 90 per cent in grade five to 93 per cent in grade three; the average for grades two through five was 91.5 per cent which was the same as the citywide average.

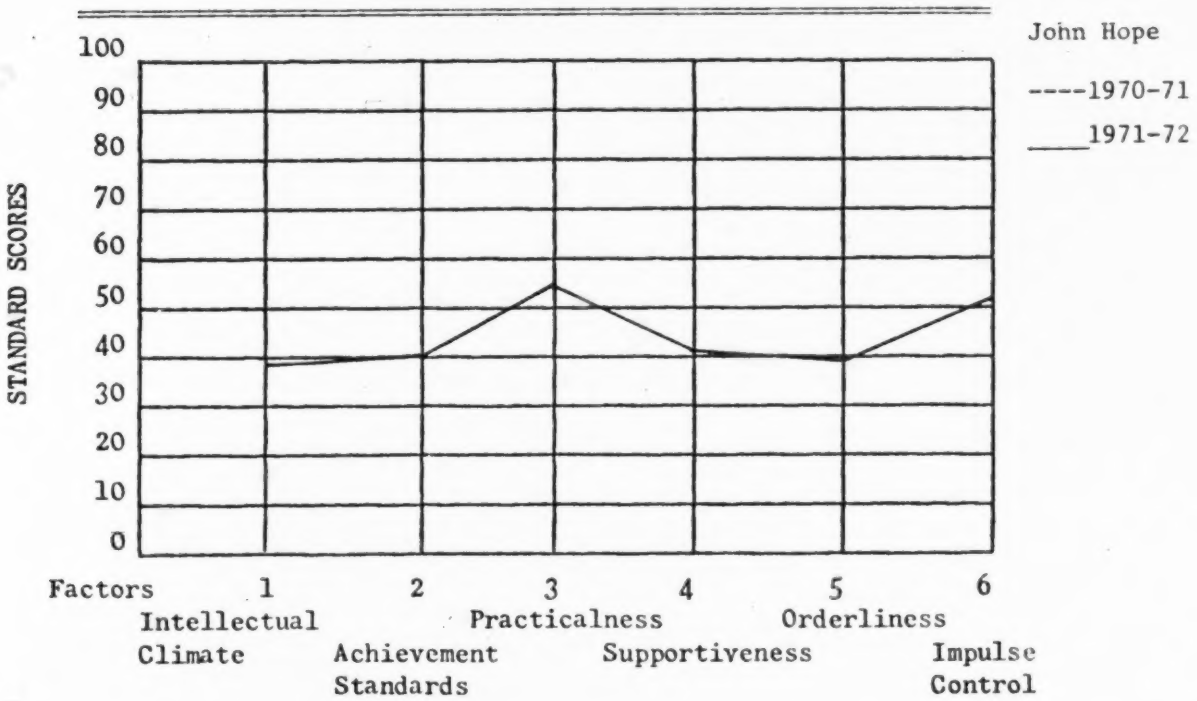
IX. COST ANALYSIS

A cost analysis was performed in order to determine the relative cost of one grade unit of reading gain based upon the rate of reading gain during fall, winter, and spring quarters of 1971-72. Data from Atlanta Public School General Funds Report, June, 1972, and the Trust and Agency Report, June, 1972, were used. Included were general funds and compensatory funds from special projects.

The cost analysis of the reading gain is reported in Table 11 on page 23. The per pupil cost for one grade unit of gain varied from $847.85 in grade two to $1,155.10 in grade five, with an average of $955.17 in grades two through five.

TABLE 10

SCHOOL PROFILE OF STANDARD FACTOR SCORES ON
THE ORGANIZATIONAL CLIMATE INDEX



In addition to determining the per pupil costs for one grade unit of gain, the cost for each unit of effectiveness as defined by the 1972 Effectiveness-Acceptability Study was computed. The reading program at John Hope was effective, and the average cost for a unit of effectiveness was $8.84.

X. CONCLUSIONS

To avoid confusion in the interpretation of the results of the Effectiveness-Acceptability Study in comparison with the Cost Analysis of the John Hope reading program, it must be remembered that the Effectiveness-Acceptability Study was based on the median scores of all pupils taking the Metropolitan Achievement Tests (MAT) pretest and/or posttest. The cost analysis utilized the mean scores of only the pupils who attended John Hope

TABLE 11

COST ANALYSIS OF READING GAINS BY GRADES
TOTAL AVERAGE DAILY ATTENDANCE (ADA) K--6 = 495

	GRADES					
	Second	Third	Fourth	Fifth	Sixth	Average
ADA	75	76	68	68	68	71 (Total = 355)
Per-Pupil Cost						
A. General Funds						
1. Regular						
a. Salary	$ 592.22	$ 592.22	$ 592.22	$ 592.22	$ 592.22	$ 592.22
b. Non-salary	37.55	37.55	37.55	37.55	37.55	37.55
c. Subtotal	$ 629.77	$ 629.77	$ 629.77	$ 629.77	$ 629.77	$ 629.77
2. CIP Salary	$ 0.08	$ 0.08	$ 0.08	$ 0.08	$ 0.08	$ 0.08
3. Total	$ 629.85	$ 629.85	$ 629.85	$ 629.85	$ 629.85	$ 629.85
B. Compensatory Funds						
1. Follow Through						
a. Salary	$ 416.53	-	-	-	-	$ 416.53
b. Non-salary	81.73	-	-	-	-	81.73
c. Subtotal	$ 498.26	-	-	-	-	$ 498.26
2. ESAP Salary	-0-	-0-	4.62	4.62	4.62	4.62
3. Title I						
a. Salary	-0-	$ 74.21	$ 114.06	$ 68.44	$ -0-	$ 85.14
b. Non-salary	-0-	1.70	1.70	1.70	1.70	1.70
c. Subtotal	-0-	$ 75.91	$ 115.76	$ 70.14	$ 1.70	$ 86.84
4. COP Non-salary	$ 8.00	-0-	-0-	-0-	-0-	$ 8.00

TABLE 11 (CONT'D.)

	Second	Third	Fourth	Fifth	Sixth	Average
	GRADES					
5. Total Compensatory Funds						
a. Salary	$ 416.53	$ 74.21	$ 118.68	$ 73.06	$ 4.62	$ 141.50
b. Non-salary	89.73	1.70	1.70	1.70	1.70	20.30
c. TOTAL COMPENSATORY FUNDS	$ 506.26	$ 75.91	$ 120.38	$ 74.76	$ 6.32	$ 161.80
C. Rate of Reading Gain (Per Cent)	1.34	0.80	-	0.61	-	0.93
D. Total Per-Pupil Cost						
1. General Funds	$1,008.83	$ 666.51	$ 710.98	$ 665.36	$ 596.92	$ 733.80
2. Compensatory Funds	127.28	39.25	39.25	39.25	39.25	57.85
3. TOTAL PER-PUPIL COST	$1,136.11	$ 705.76	$ 750.23	$ 704.61	$ 636.17	$ 791.65
E. Projected Cost for One-Grade-Unit of Gain						
1. General Funds	$ 470.04	$ 787.31	-	$1,032.54	-	$ 754.80
2. Compensatory Funds	377.81	94.89	-	122.56	-	200.37
3. Subtotal	$ 847.85	$ 882.20	-	$1,155.10	-	$ 955.17
F. Gain Rate of Effectiveness	67	150	120	100	-	109
G. Expenditure per ADA of Compensatory Funds for Each Unit of Effectiveness						
1. General Funds	$ 9.40	$ 4.20	$ 5.25	$ 6.30		$ 6.31
2. Compensatory Funds	7.56	0.51	1.00	0.75	-	2.53
3. Total	$ 16.96	$ 4.71	$ 6.25	$ 7.05		$ 8.84

Elementary School for the entire year, taking both the MAT pretest and posttest. However, even though the two approaches were taken to analyze the pupil performance, the findings of the two studies were similar except at the second grade level. At that level it was found that the reading instruction was ineffective; the median gain was only two months during the six month period. However, when the pupils who took the pretest only and the pupils who took the posttest only were excluded, and the mean scores of pupils who took both the pretest and posttest were analyzed, it was found that the pupils gained at the rate of 134 per cent (more than one month for each month in the program).

The performance of the Follow Through children in levels corresponding to the first and second grades was analyzed on the basis of the number of years the pupils had participated in Follow Through. There was no significant difference in phonics skills performance based on Follow Through experience.

It was found that 62.1 per cent of the first grade pupils scored C or above on the MAT. When the pupils were divided for evaluation based on the number of years they participated in Follow Through, fifty-five per cent of the first grade pupils who had attended Follow Through kindergarten and first grade compared with 46.7 per cent of the pupils who had entered Follow Through in the first grade scored 1.6 or above on the Total Reading of the MAT. However, the percentages of the two groups scoring 1.6 or higher on Total Mathematics of the MAT were similar (35 per cent compared with 33 per cent, respectively). Therefore, it can be concluded that while the reading performance of the first grade pupils in Follow Through for two years was superior to that of those in Follow Through for only one year, there was little difference in mathematics performance.

The performance of the second grade pupils was evaluated based on Follow Through experience. It was found that the pupils who participated in Follow Through from kindergarten through the second grade scored significantly higher on all subtests of the MAT than either the second grade pupils who had entered Follow Through in the first grade or those who entered Follow Through in the second grade. Therefore, those second grade pupils in Follow Through for three years were the better performers in both reading and mathematics.

In the Follow Through Program at John Hope, the greatest impact was made in the areas in which the objectives were clearly stated in behavioral terms.

In the areas in which the objectives were defined in process and not clarified in performance terms, such as the parent involvement objective, no pupil gain could be identified.

When evaluating the performance of the pupils at John Hope based on Follow Through experience, it was found that approximately 75 per cent of the first grade pupils had participated in Follow Through during the kindergarten and the first grade. At the second grade level, approximately 50 per cent of the children had participated in Follow Through from the kindergarten through the second grade. While this appears to be a reflection of high mobility, the stability index for the school was 78 per cent. The chief reason many pupils entered Follow Through at the first grade level is kindergarten attendance is no mandatory in Atlanta Public Schools.

Although found not effective in 1970-71, both the reading and the mathematics programs at John Hope were found to be effective during 1971-72. The level of acceptability was low in reading, but the level of acceptability of the overall mathematics program was 74 per cent, indicating that the mathematics performance of the pupils lacked 26 per cent approaching the national norm.

The pupil attendance at John Hope Elementary School was 91.5 per cent. This was approximately the same as the citywide average.

The climate at John Hope, as viewed by the teachers, was not open. Although no significant correlation between the degree of openness and pupil achievement has been found, openness indicates an environment which is supportive and satisfying to teachers. The lack of openness indicates a need for more communication and understanding among the staff.

XI. RECOMMENDATIONS

Based on the test data and information from the staff at John Hope Elementary School, the recommendations are as follows:

1. Continue the effective reading and mathematics programs at John Hope.
2. Refine the Follow Through objectives and state all in behavioral terms.
3. Strive for a more open climate at John Hope.

APPENDIX

MURRAY'S NEED-PRESS SCALES

1. Abasement-assurance: self-deprecation versus self-confidence
2. Achievement: striving for success through personal effort
3. Adaptability-defensiveness: acceptance of criticism versus resistance to suggestion
4. Affiliation-rejection: friendliness versus unfriendliness
5. Aggression-blame avoidance: hostility versus disorganization

6. Change-sameness: flexibility versus routine
7. Conjunctivity-disjunctivity: planfulness versus organization
8. Counteraction-inferiority avoidance: restriving after failure versus withdrawal
9. Deference-restiveness: respect for authority versus rebelliouness
10. Dominance-tolerance: ascendance versus forbearance

11. Ego Achievement: striving for power through social action
12. Emotionality-placidity: expressiveness versus restraint
13. Energy-passivity: effort versus inertia
14. Exhibitionism-inferiority avoidance: attention-seeking versus shyness
15. Fantasied achievement: daydreams of extraordinary public recognition

16. Harm avoidance--risk-taking: fearfulness versus thrill seeking
17. Humanities-social sciences: interests in the humanities and the social sciences
18. Impulsiveness-deliberation: impetuosity versus reflection
19. Narcissism: vanity
20. Nuturance-rejection: helping others versus indifference

21. Objectivity-projectivity: detachment versus superstition (AI) or suspicion (EI)
22. Order-disorder: compulsive organization of details versus carelessness
23. Play-work: pleasure-seeking versus purposefulness
24. Practicalness-impracticalness: interest in practical activities versus indifference
25. Reflectiveness: introspective contemplation

26. Science: interest in the natural sciences
27. Sensuality-puritanism: interest in sensory and aesthetic experiences
28. Sexuality-prudishness: heterosexual interests versus inhibitions of heterosexual interests
29. Supplication-autonomy: dependency versus self-reliance
30. Understanding: intellectuality

ORGANIZATIONAL CLIMATE INDEX FACTORS

A. Development Press

1. Intellectual climate — This factor describes a concern with intellectual activity, social action, and personal effectiveness. It is based on the scales for humanities, social science, science, reflectiveness, understanding, fantasied achievement, exhibitionism, and change. A school that scores high on this factor is one in which there is a high degree of intellectuality, heterosexual interests, flexibility, and attention seeking.

2. Achievement standards — This is the factor reflecting press for achievement. Schools high on this factor stress hard work, perseverance, and a total day-by-day commitment to institutional purposes. It is defined by counteraction, energy, achievement, emotionality, and ego achievement.

3. Practicalness — This factor suggests an environmental dimension of practicality tempered with friendliness. It is defined by practicalness and nurturance. A school that scores high on this factor is one in which the teachers feel there is a high interest in practical activity and a desire for helping others.

4. Supportiveness — This factor deals with aspects of the organizational environment that respect the integrity of the teacher as a person, but the implication is that dependency needs must be supported rather than personal autonomy emphasized. It might be considered a measure of democratic paternalism. The scales defining it are assurance, tolerance, objectivity, affiliation, conjunctivity, supplication, blame avoidance, harm avoidance, and nurturance. A school that scores high on this factor is one in which the teachers feel a high degree of self-confidence, friendliness, and planfulness.

5. Orderliness — The components of this factor are concerned with the press for organizational structure, procedure, orderliness, and a respect for authority. Conformity to community pressures and an effort to maintain a proper institutional image probably are also concomitants of a high score on this factor. It is based on order, narcissism, adaptability, conjunctivity, deference, and harm avoidance. A school that scores high on this factor is one in which the teachers feel there is a compulsive organization of details, acceptance of criticism, respect for authority, vanity, and planfulness.

B. Control Press

In addition to the reflection of factors (1) and (2) under Development Press, Control Press involves:

Impulse control -- This factor implies a high level of constraint and organizational restrictiveness. There is little opportunity for personal expression or for any form of impulsive behavior. It is based on work instead of play; prudishness versus sexuality; aggression versus blame avoidance; impulsiveness versus deliberation; emotionality versus placidity; and exhibitionism versus inferiority avoidance. A school that scores high on this factor is one in which the teachers feel there is a high degree of purposefulness, heterosexual interests, hostility, impetuosity, expressiveness, and restriving after failure.